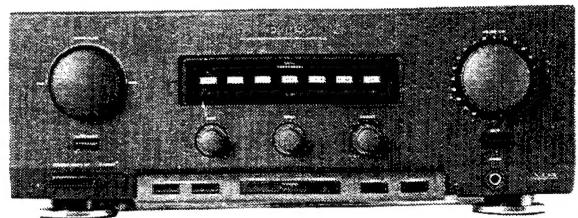


Service
Service
Service



Service Manual

TABLE OF CONTENTS

	page
Specification	1
Connections and controls	2
Adjustment	3
Semiconductor layout	4, 13
Schematic diagrams and parts location	5-12, 14-28
Exploded view and parts list	29-31
Electrical parts list	31, 32

(GB)

Safety regulations require that the set be restored to its original condition and that parts which are identical with those specified, be used.

(F)

Les normes de sécurité exigent que l'appareil soit remis à l'état d'origine et que soient utilisées les pièces de rechange identiques à celles spécifiées.

(NL)

Veiligheidsbepalingen vereisen, dat het apparaat bij reparatie in zijn oorspronkelijke toestand wordt teruggebracht en dat onderdelen, identiek aan de gespecificeerde, worden toegepast.

(D)

Bei jeder Reparatur sind die geltenden Sicherheitsvorschriften zu beachten. Der Original zustand des Geräts darf nicht verändert werden; für Reparaturen sind Original-Ersatzteile zu verwenden.

(I)

Le norme di sicurezza esigono che l'apparecchio venga rimesso nelle condizioni originali e che siano utilizzati i pezzi di ricambio identici a quelli specificati.

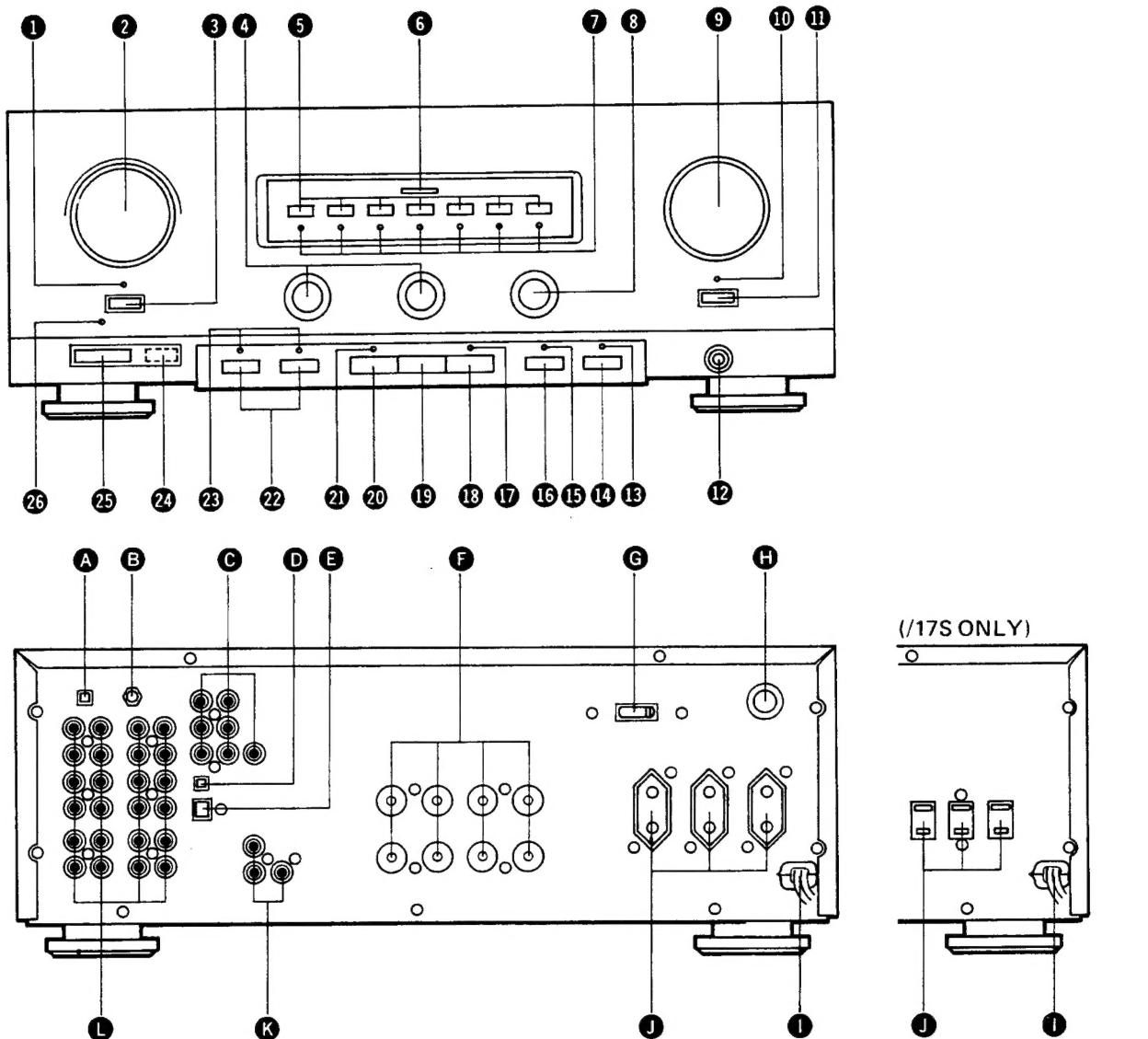
SPECIFICATION

General	Nominal value		Typical value
Mains voltage	: 220V ~ (/00S), 120/220/240V ~ (/01S)		: 220V ~ (/00S), 120/220/240V ~ (/01S)
Mains frequency	: 240V ~ (/05S), 120V ~ (/17S)		: 240V ~ (/05S), 120V ~ (/17S)
	: 50 Hz (/00S/05S), 50/60 Hz (/01S),		: 50 Hz (/00S/05S), 50/60 Hz (/01S),
	60 Hz (/17S)		60 Hz (/17S)
Power consumption	: 420W		: 420W
Dimensions (WxHxD)	: 435 x 146 x 380 mm		: 435 x 146 x 380 mm
Weight	: 10 kg		: 10 kg
Amplifier			
Output power	: 100W in 8Ω (IEC)		: 103W in 8Ω (IEC)
Distortion			
T.H.D.	: ≤ 0.09% at 1 kHz		: ≤ 0.05% at 1 kHz
	: ≤ 0.7% at 63 Hz – 12.5 kHz	{ (IEC)	: ≤ 0.05% at 63 Hz – 12.5 kHz
Intermodulation	: ≤ 0.09% at 60/7000 Hz 4:1		{ (IEC)
Frequency characteristic			
Phono input	tone control	: from 20 Hz – 20 kHz ±1 dB (IEC/RIAA)	: from 20 Hz – 20 kHz ±0.5 dB (IEC/RIAA)
Other inputs	neutral	: from 10 Hz – 45 kHz ±1 dB	: from 10 Hz – 50 kHz ±1 dB
Bass control		: at 100 Hz +10 dB to –10 dB ±2 dB	: at 100 Hz +10 dB to –10 dB
Treble control		: at 10 kHz +10 dB to –10 dB ±2 dB	: at 10 kHz +10 dB to –10 dB
Loudness		: at 100 Hz +6 dB ±2 dB	: at 100 Hz +6 dB
		: at 10 kHz +4 dB ±1.5 dB	{ –30dB position
Signal/noise ratio			
weighted (A-curve)			
Phono input	(MM)	: for 1W output ≥ 75 dB (IHF)	: for 1W output ≥ 80 dB (IHF)
	(MC)	: for 1W output ≥ 64 dB (IHF)	: for 1W output ≥ 70 dB (IHF)
Other inputs		: for 1W output ≥ 83 dB (IHF)	: for 1W output ≥ 86 dB (IHF)
Channel separation		: at 1000 Hz ≥ 45 dB	: at 1000 Hz ≥ 60 dB
		: at 250 Hz – 10 kHz ≥ 40 dB	: at 250 Hz – 10 kHz ≥ 45 dB
Input sensitivity/Input impedance			
Audio			
Phono	(MM)	: 2.5 mV/47 kΩ	: 2.5 mV/47 kΩ
	(MC)	: 250 µV/100Ω	: 250 µV/100Ω
High level (Analogue)		: 150 mV/17 kΩ	: 150 mV/22 kΩ
High level (Digital)		: 250 mVp-p/75Ω (IEC985)	: 200 mVp-p/75Ω (IEC985)
Output level/Output impedance			
DCC/VCR/Tape/CDR/Processor			
(Analogue)		: 280 mV/600Ω (Phono 5 mV 1 kHz input)	: 280 mV/400 Ω (Phono 5 mV 1 kHz input)
DCC/DSP (Digital)		: 500 mVp-p/75Ω (IEC985)	: 500 mVp-p/75Ω (IEC985)

Note

/17S: FA950PBK01

CONNECTIONS AND CONTROLS



1	Auto select indicator	D461	24	IR sensor	J431
2	Source select switch	S475	25	Power/standby switch	S301
3	Auto select switch	S467		(00S/01S/05S)	S301
4	Tone control	R521, R522		(/17S)	S302
5	Function indicator	V482~V488			
6	Digital indicator	V481	26	Standby indicator	D463
7	Rec. out indicator	D471~D477	A	Phono selector	S551
8	Balance control	R523	B	Ground terminal	J014
9	Volume control	R546	C	Digital input/output	J402, J403
10	Mute indicator	D481	D	CD opt./coax. switch	S292
11	Mute switch	S471	E	CD optical input	J401
12	Headphone socket	J501	F	Speakers output	J262, J263
13	Loudness indicator	D466	G	Voltage selector	(/01S only) S411
14	Loudness switch	S465	H	Fuse holder	(/01S only) J012
15	Mono indicator	D465	I	Mains cord	W015
16	Mono switch	S463	J	AC outlet	(/00S/01S/05S) J221~J223
17	Source direct indicator	D464		(/17S)	J225
18	Source direct switch	S461	K	System control socket	J251, J253
19	Processed indicator	D478, D479	L	Analogue input/output	J561, J562,
20	Rec. select switch	S466			J571, J572
21	Rec. select indicator	D462			
22	Speakers switch	S462, S464			
23	Speakers indicator	D467, D468			
				Note	
				/17S: FA950PBK01	

ADJUSTMENT

Idling Current

SK... SWITCH							D.C. METER INDICATOR
			Min.	Lch R323			Lch TP1 (+), TP3 (-) DC 15 mV (41.7 mA)
				Rch R324			Rch TP2 (+), TP4 (-) DC 15 mA (41.7 mA)

GB Notes:

- 1 minute after the power has been switched ON, adjust to read 15 mV DC.
- If the heat-sink temperature is higher than the ambient temperature, switch the power OFF, and leave the unit until the heat-sink temperature falls equal to or below the ambient temperature before proceeding to the idling current adjustment.

F Remarques:

- 1 minute après avoir fourni l'alimentation, ajuster pour lire 15 mV CC.
- Si la température de la plaque de refroidissement est supérieure à la température ambiante, couper l'alimentation et laisser l'appareil jusqu'à ce que la température de la plaque de refroidissement soit égale ou inférieure à la température ambiante avant de passer à l'ajustement du courant déwatté.

NL Opmerkingen:

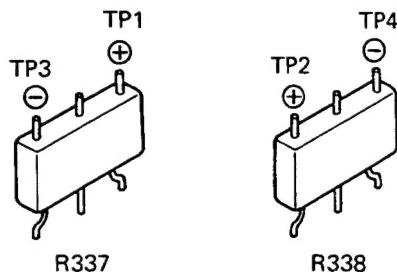
- Maak de instelling zodanig dat 15 mV gelijkstroom aangegeven wordt na 1 minuut nadat de spanning ingeschakeld wordt.
- Als de temperatuur van de warmteput hoger is dan de omringende temperatuur, schakel dan de spanning uit totdat de temperatuur van de warmteput gelijk is aan of lager is dan de omringende temperatuur alvorens over te gaan tot aanpassen op de stationaire stroom.

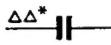
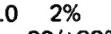
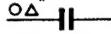
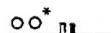
D Anmerkungen:

- 1 Minute nach Einschalten der Spannungsversorgung so einstellen, daß 15 mV Gleichstrom angezeigt wird.
- Wenn die Temperatur des Kühlkörpers höher ist als die Umgebungstemperatur, die Spannungsversorgung ausschalten und warten, bis die Temperatur des Kühlkörpers gleich der oder niedriger als die Umgebungstemperatur wird, bevor die Ruhestrom-Einstellung durchgeführt wird.

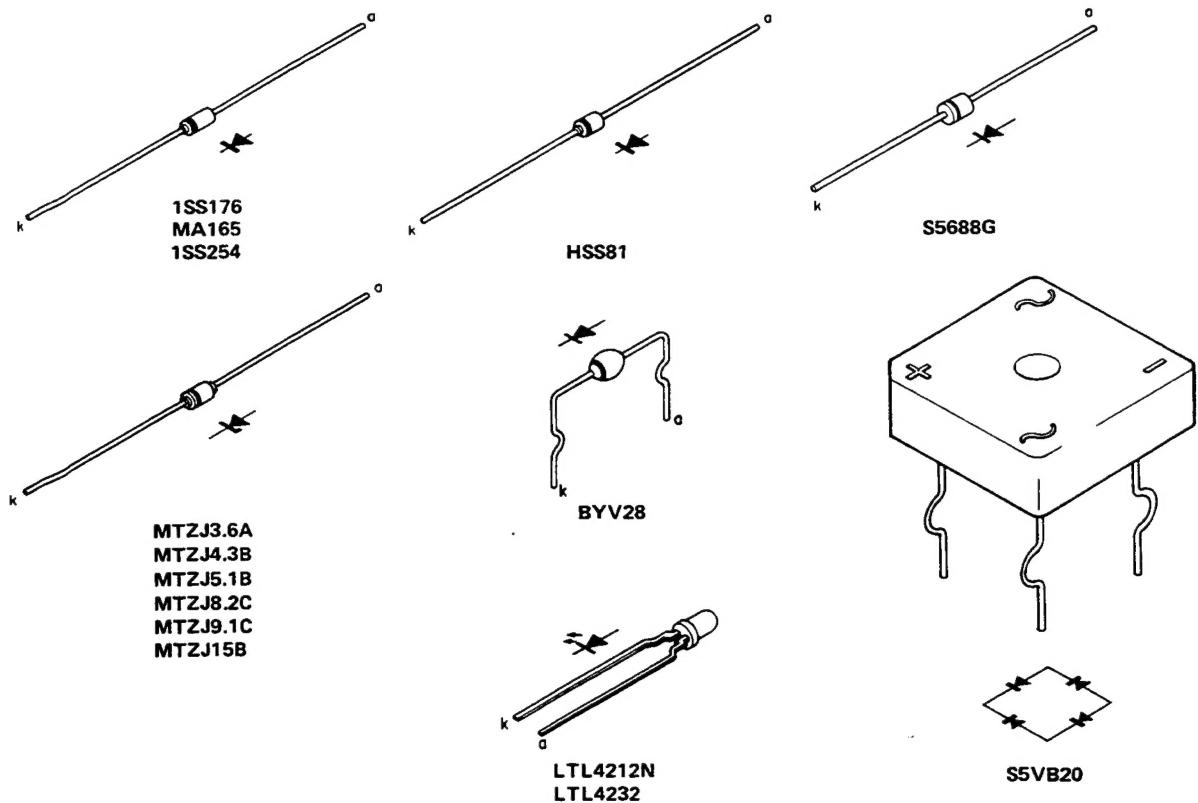
I Note:

- Fate in modo de ottenere un valore di 15 mV di c.c. un minuto dopo l'accensione.
- Se la temperatura degli organi di dispersione del calore è superiore a quella dell'ambiente, spegnete l'unità e lasciatela raffreddare sino a che la sua temperatura non diviene uguale o inferiore a quella ambiente, quindi procedete con la regolazione della corrente a riposo.



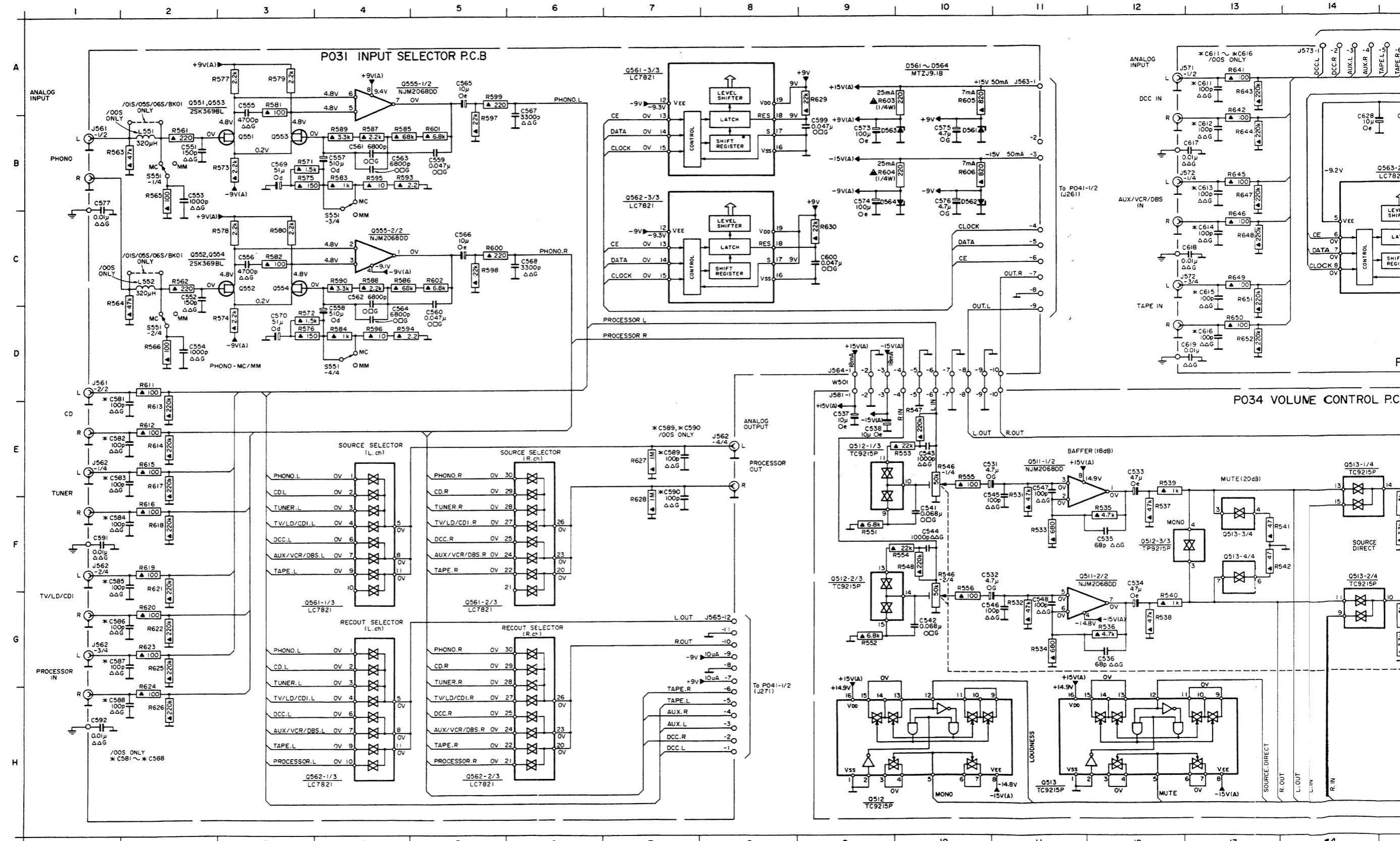
	Carbon film 0.125 W or 0.2 W	70°C	5%		Ceramic plate Tuning $\leq 120 \text{ pF}$ NP.0	2%		Others	-20/+80%	*a = 2.5 V b = 3.15 V or 4 V c = 6.3 V d = 10 V e = 16 V f = 25 V g = 40 V h = 63 V j = 100 V l = 125 V m = 150 V n = 160 V q = 200 V r = 250 V s = 300 V t = 350 V u = 400 V v = 500 V w = 630 V x = 1000 V A = 1.6 V B = 6 V C = 12 V D = 15 V E = 20 V F = 35 V G = 50 V H = 75 V I = 80 V
	Carbon film 0.25 W or 0.33 W	70°C	5%		Polyester flat foil	10%				
	Metal film 0.25 W or 0.33 W	70°C	5%		Metallized polyester flat film	10%				
	Carbon film 0.5 W	70°C	5%		Polyester flat foil small size (Mylar)	10%				
	Carbon film 0.67 W	70°C	5%		Polysterene film/foil	1%				
	Carbon film 1 W or 1.15 W	70°C	5%		Tubular ceramic					
(C) Chip component					Miniature single					
(C) Chip component					Subminiature tantalum	$\pm 20\%$				

SEMICONDUCTOR LAYOUT



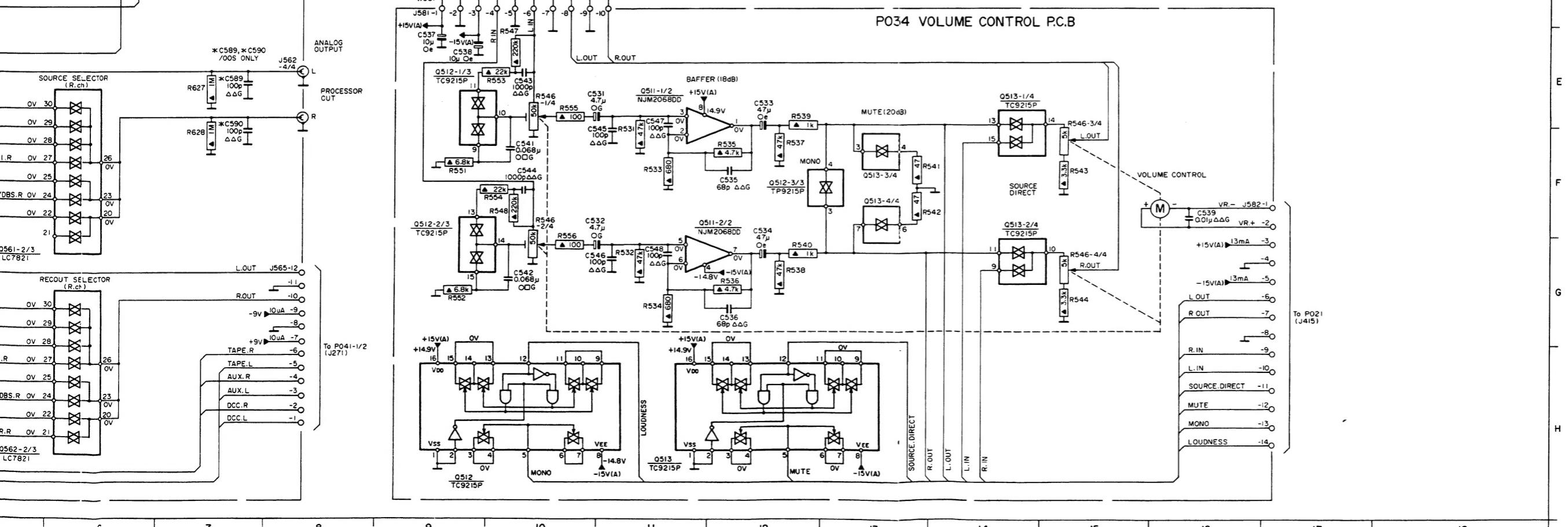
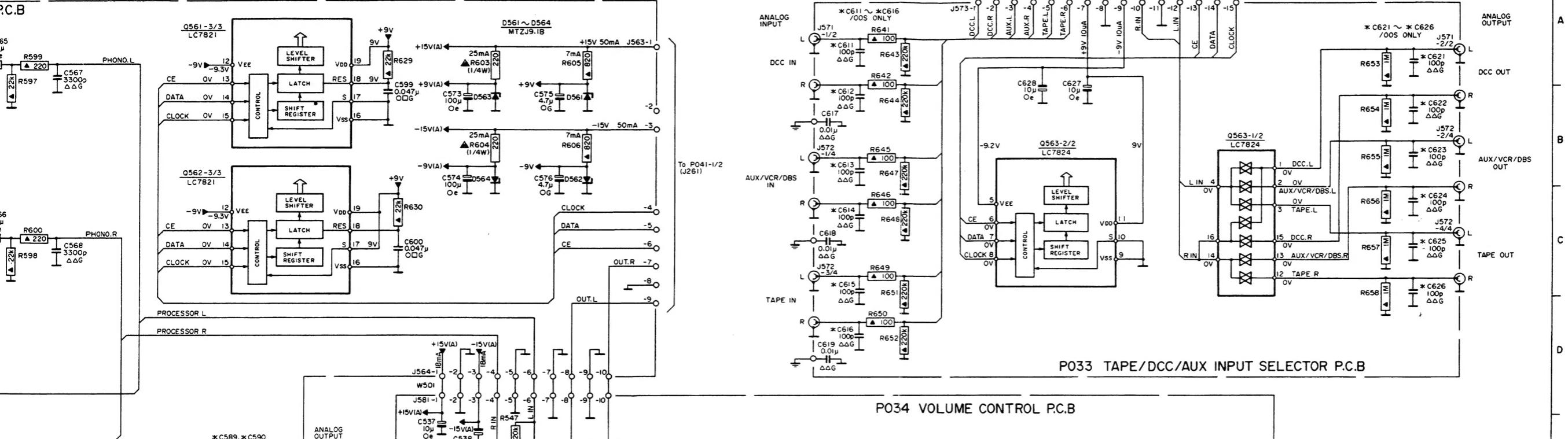
SCHEMATIC DIAGRAM AND PARTS LOCATION

C531 E10	C542 G10	C554 D2	C561 D4	C576 B10	C589 E7	C615 C13	C626 C18	J562 E8	L552 C21	Q513 H11	R562 B7	R536 G12	R546 F10	R556 G10	R574 D5	R584 D4	R596 D4	R606 B10	R620 G2	R630 C9	R650 D13	S551 C4
C532 F10	C543 E10	C555 A3	C565 A5	C577 D1	C591 C7	C616 D3	C627 A7	J562 F1	L552 E11	Q513 B9	R562 B4	R536 F12	R546 G19	R556 B5	R576 C3	R586 C4	R598 C5	R612 C6	R622 B13	R642 D13	S551 D2	
C533 E10/2	C544 F10	C556 B5	C566 C6	C578 D1	C592 E1	C618 C3	C629 B10	J571 A13	Q512 F9	Q553 B3	R563 B15	R538 G12	R547 E10	R562 B1	R577 A3	R587 B4	R599 A5	R613 E2	R623 G2	R643 A13	R653 A17	
C534 E10	C545 F10	C557 B4	C567 A6	C579 D1	C593 E1	C619 D13	C630 B10	J571 A18	Q512 F2	Q554 C3	R563 B16	R539 G12	R548 F10	R562 C1	R578 C3	R588 C4	R601 B5	R615 E2	R625 G2	R645 B13	R655 B17	
C535 F12	C546 G10	C558 D4	C568 C6	C583 E1	C599 B9	C621 A18	C632 B18	J572 B13	Q512 H5	Q555 A4	R563 F11	R541 F13	R551 F9	R565 B2	R579 A3	R589 B4	R602 C5	R616 F2	R626 H2	R646 C13	R656 C17	
C536 G12	C547 F11	C559 B5	C569 B3	C584 F1	C600 C9	C622 A18	C634 B18	J572 C12	Q512 G9	Q555 C4	R563 F11	R542 F13	R552 G9	R566 D2	R580 C3	R590 C4	R602 C5	R616 F2	R626 H2	R646 C13	R656 C17	
C537 E9	C548 G11	C560 D5	C570 D3	C585 F1	C611 A13	C622 B18	C634 B18	J572 D1	Q512 H4	Q561 G4	R563 F11	R542 F13	R552 G9	R566 D2	R580 C3	R590 C4	R602 C5	R616 F2	R626 H2	R646 C13	R656 C17	
C538 F16	C551 B2	C561 B4	C573 B9	C586 G1	C612 B13	C623 B18	C634 B18	J561 D1	Q512 H3	Q561 G3	R563 F11	R542 F13	R552 G9	R566 D2	R580 C3	R590 C4	R602 C5	R616 F2	R626 H2	R646 C13	R656 C17	
C539 F16	C552 C2	C562 C4	C574 B9	C587 G1	C613 B13	C623 B18	C634 B18	J562 D1	Q512 H3	Q561 G3	R563 F11	R542 F13	R552 G9	R566 D2	R580 C3	R590 C4	R602 C5	R616 F2	R626 H2	R646 C13	R656 C17	
C541 F10	C553 B2	C563 B4	C575 B10	C588 H1	C614 C13	C625 C18	J562 E1	L551 B2	Q513 G14	Q561 A7	R535 F12	R546 E10	R555 E10	R565 B3	R585 B4	R605 A10	R619 F2	R629 A9	R649 C13	S551 B2		



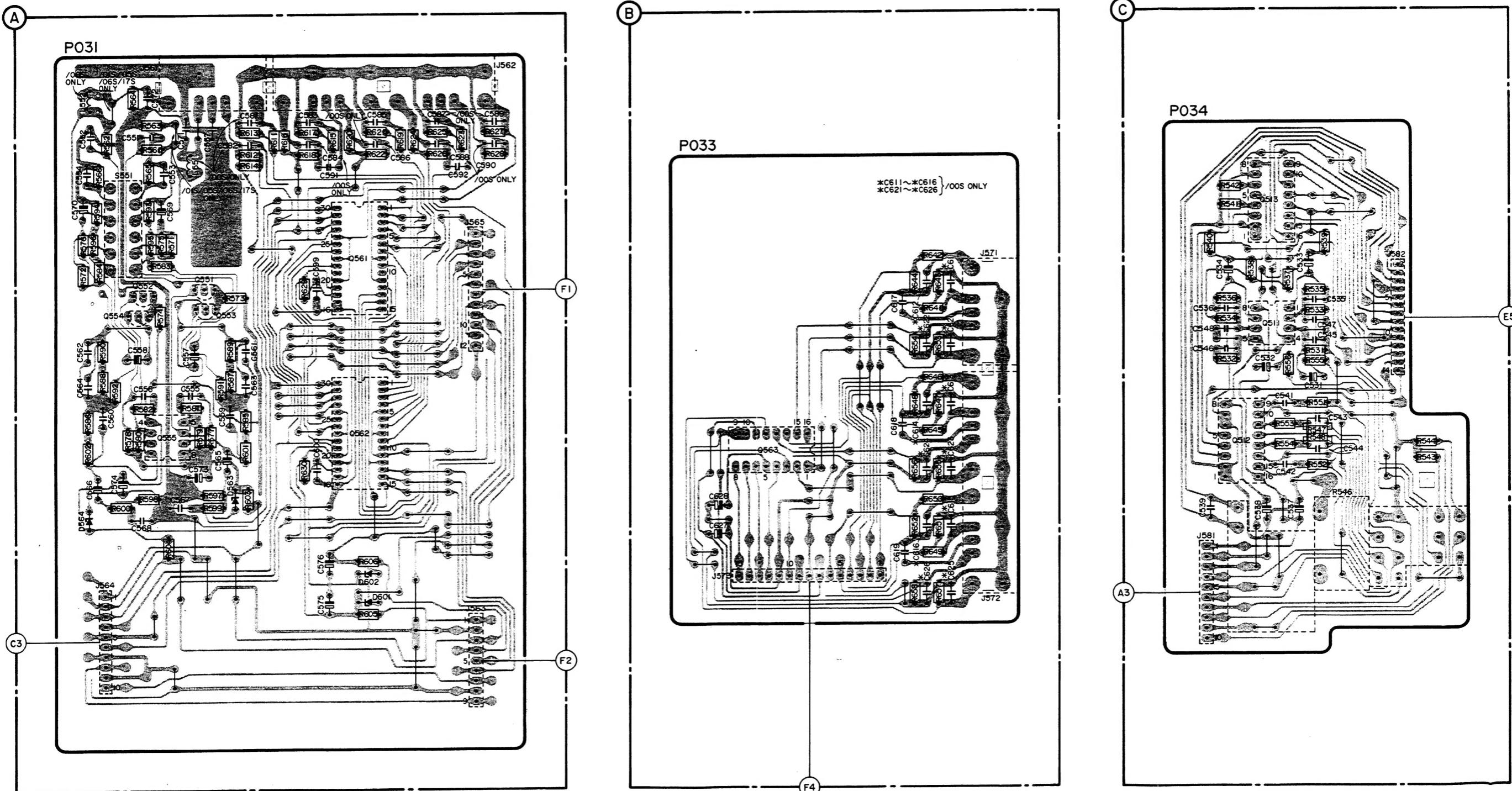
L552 C2 Q513 H1 R562 B7 R536 G12 R546 F10 R556 G10 R574 D3 R584 D4 R606 B10 R620 C9 R650 D13 S551 C4
 Q511 E1 R562 H4 R537 G12 R546 F10 R556 G10 R574 D3 R584 D4 R606 B10 R620 C9 R650 D13 S551 D4
 Q512 E9 Q553 B3 R563 B15 R539 F12 R547 G10 R563 B1 R577 A3 R587 B4 R605 C5 R622 E2 R643 A13 R652 A17
 Q512 F12 Q554 C3 R563 B16 R540 G12 R548 F10 R564 C1 R578 C3 R588 C4 R600 C5 R623 E2 R644 B13 R653 B17
 Q512 H9 Q555 A4 R531 G11 R541 F13 R551 F9 R565 B2 R579 A3 R589 B4 R601 B5 R624 E2 R644 B13 R654 B17
 Q512 G9 Q555 C4 R532 G11 R542 F13 R552 G9 R566 D2 R580 C3 R590 C4 R602 C5 R625 E2 R644 B13 R655 B17
 Q513 E14 Q561 G4 R533 F11 R543 F15 R553 E10 R571 B3 R581 A3 R593 B4 R603 A9 R617 E2 R626 E7 R647 B13 R657 D17
 Q513 G14 Q561 A7 R535 F12 R546 E10 R555 E10 R573 B3 R583 B4 R595 B4 R605 A10 R619 F2 R629 A9 R649 C13 S551 B2

6 7 8 9 10 11 12 13 14 15 16 17 18

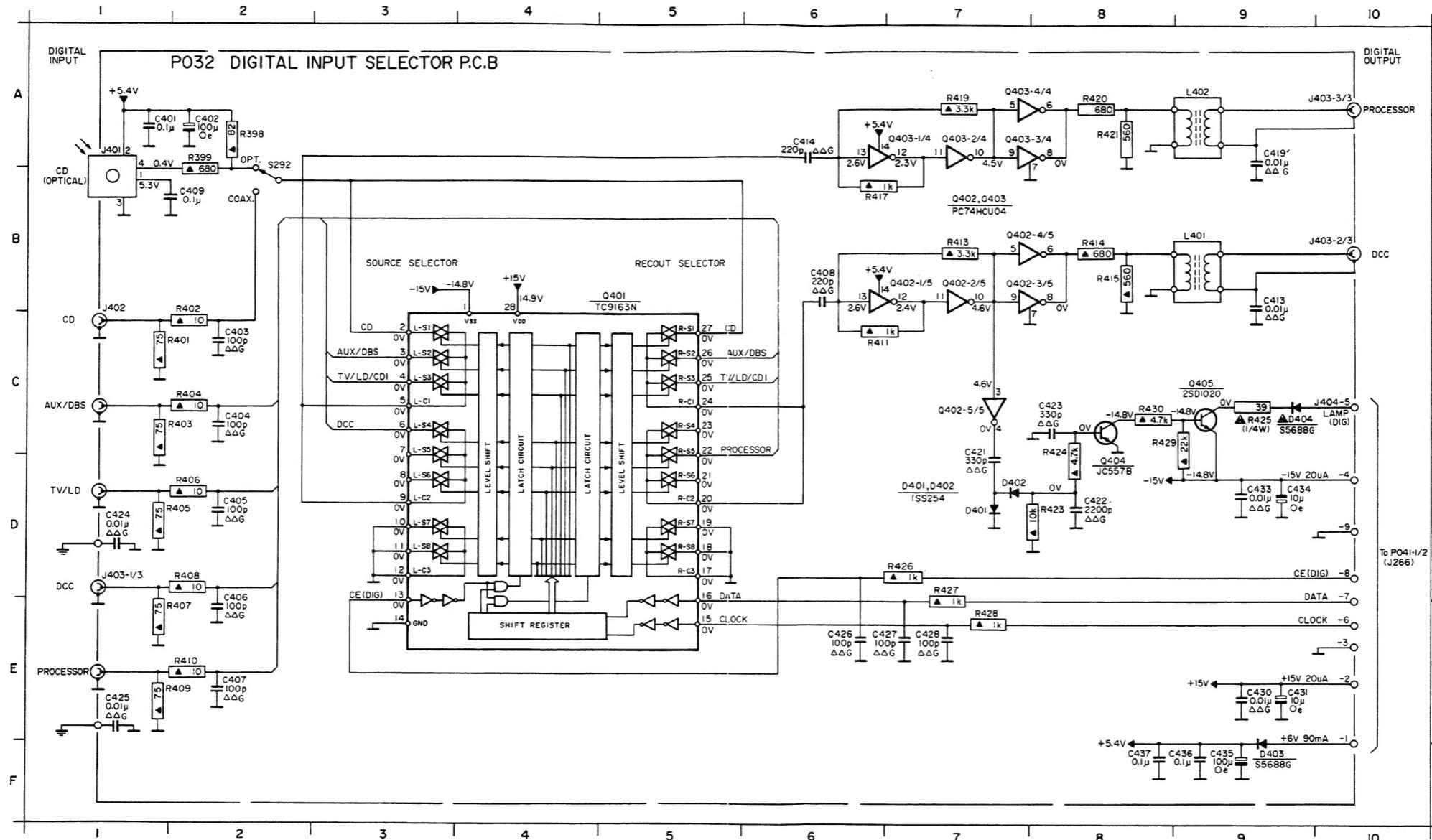


R	R576 R596 R594 R561~R566 R593 R595 R575 R571 R573 R611~R614 R615~R618 R619~R620 R623~R628	R572 R584 R590 R588 R592 R583 R574 R591 R589 R587 R629 R606	R586 R602 R597~R600 R604 R577~R582 R585 R601 R603 R630 R605	C570 C554 C552 C551 C572 C569 C553 C571 C557 C581~C584 C591 C585~C588 C592 C590 C589	C562 C564 C558 C556 C557 C555 C561 C563 C599 C566 C560 C574 C568 C567 C573 C565 C559 C600 C576 C575	D564 D563 D602 D601	Q554 Q552 Q555 Q551 Q553 Q561 Q562	L-S L552 S551 L551	R641~C658	R540~R542 R537~R539
									R531~R536 R556 R555	R544
C									R551~R554 R546~R548	R543
									C533~C536 C545~C548	
D									C532 C531	
									C539 C538 C537 C541~C544	
Q									Q512 Q513 Q511	
L-S										

SOLDER SIDE VIEW

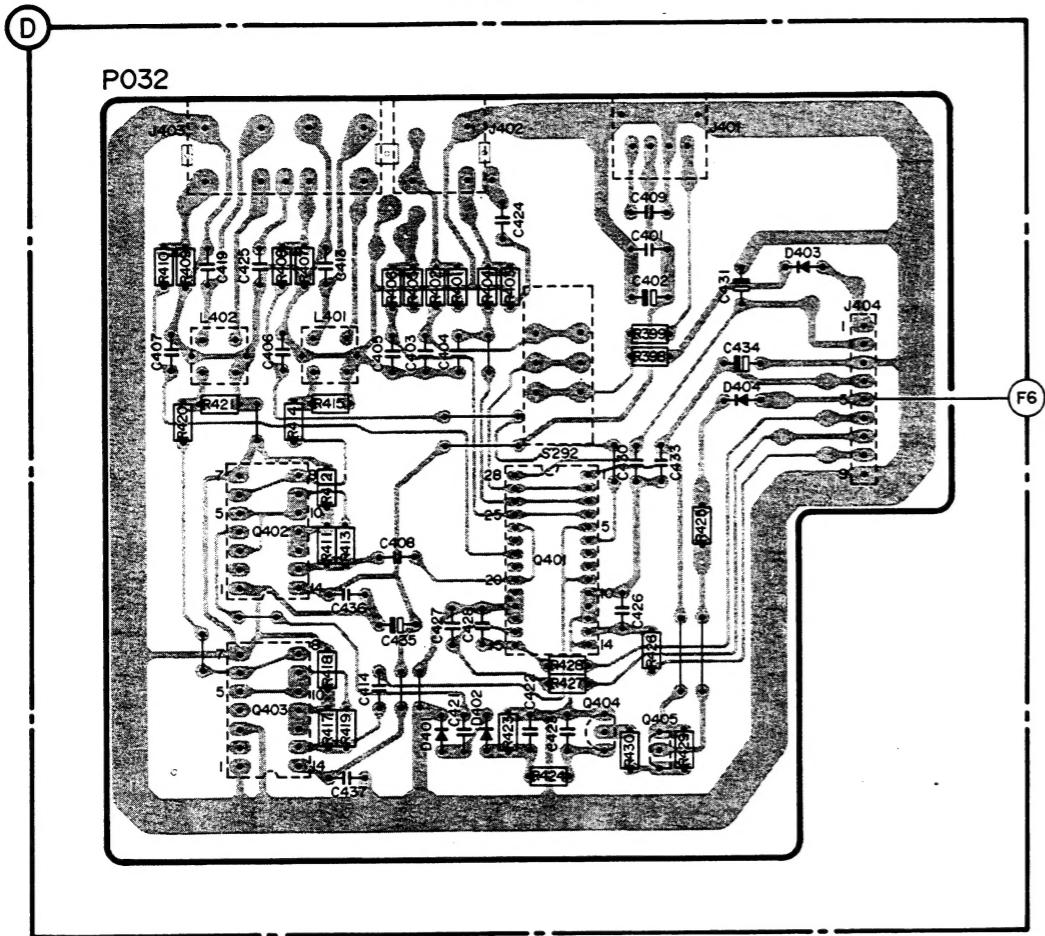


C401 A1	C414 A6	C430 E9	D402 D7	Q402 B7	R404 C26	R415 B8	R428 E7
C402 A2	C419 A9	C431 E9	D406 F5	Q402 C7	R405 D26	R419 B6	R429 C8
C403 C2	C420 C9	C433 D9	D404 A9	Q402 D7	R407 E26	R419 A8	R430 C8
C404 D2	C422 D8	C434 D9	D401 A1	Q404 D8	R407 E26	R421 A8	S292 A2
C405 D3	C423 D8	C435 F9	J402 B1	Q405 C9	R408 D26	R423 D8	
C406 D2	C424 D1	C436 F9	J403 A10	R398 A2	R409 E26	R424 C8	
C407 E2	C425 E1	C437 F8	J403 B10	R399 A2	R410 E26	R425 C9	
C408 B6	C426 E6	D401 D7	L401 B2	R401 C2	R411 C6	R426 D7	
C409 B6	C427 E6		L402 B2	R402 B2	R413 B7	R427 D7	
C413 B9	C428 E7		Q401 B5	R403 C2	R414 B8	R427 D7	

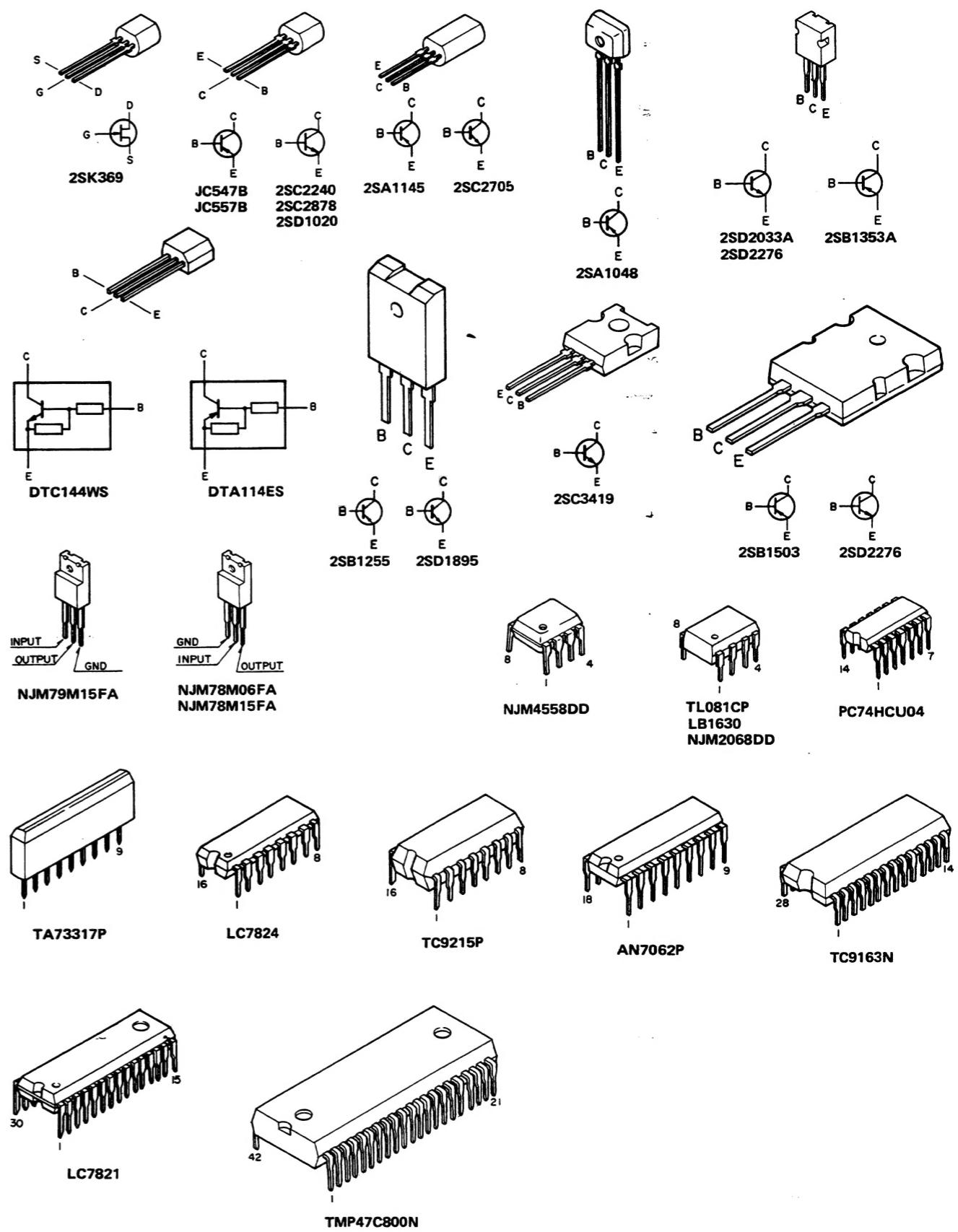


R	R410 R409	R408 R407	R401~R406	R428 R427 R399 R398	R
	R420 R421	R411 R415 R417 R419	R423 R424	R430 R426 R429 R425	
C	C407 C419 C425 C406 C413 C405 C403 C404	C424	C409 C401 C402 C431 C434	C	
	C435 ~ C437 C414 C408 C427 C428 C421 ~ C423 C430 C426 C433				
D		D401 D402		D404 D403	D
Q	Q402 Q403	Q401 Q404 Q405			Q
L-S	L402	L401	S292		L-S

SOLDER SIDE VIEW

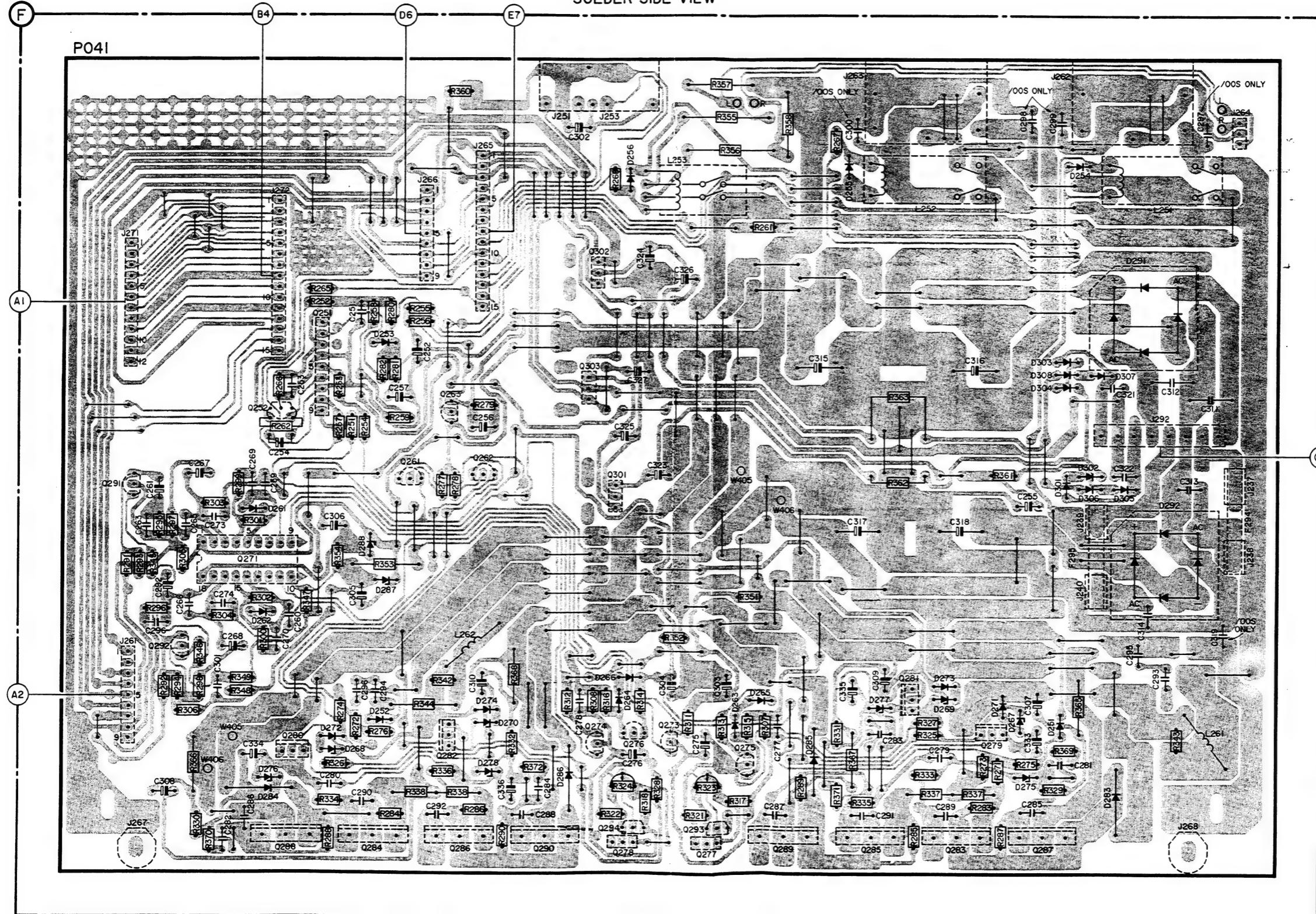


SEMICONDUCTOR LAYOUT

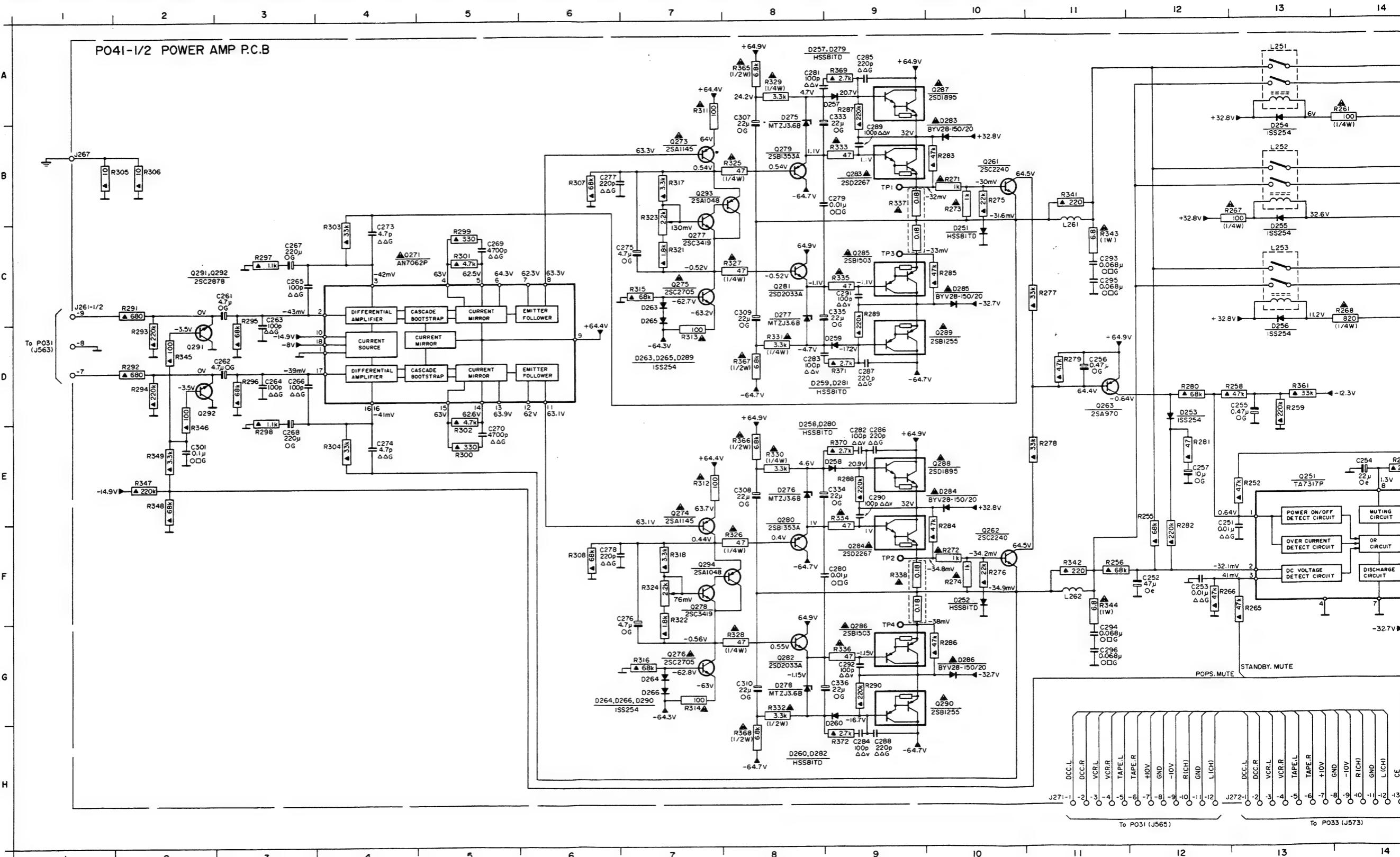


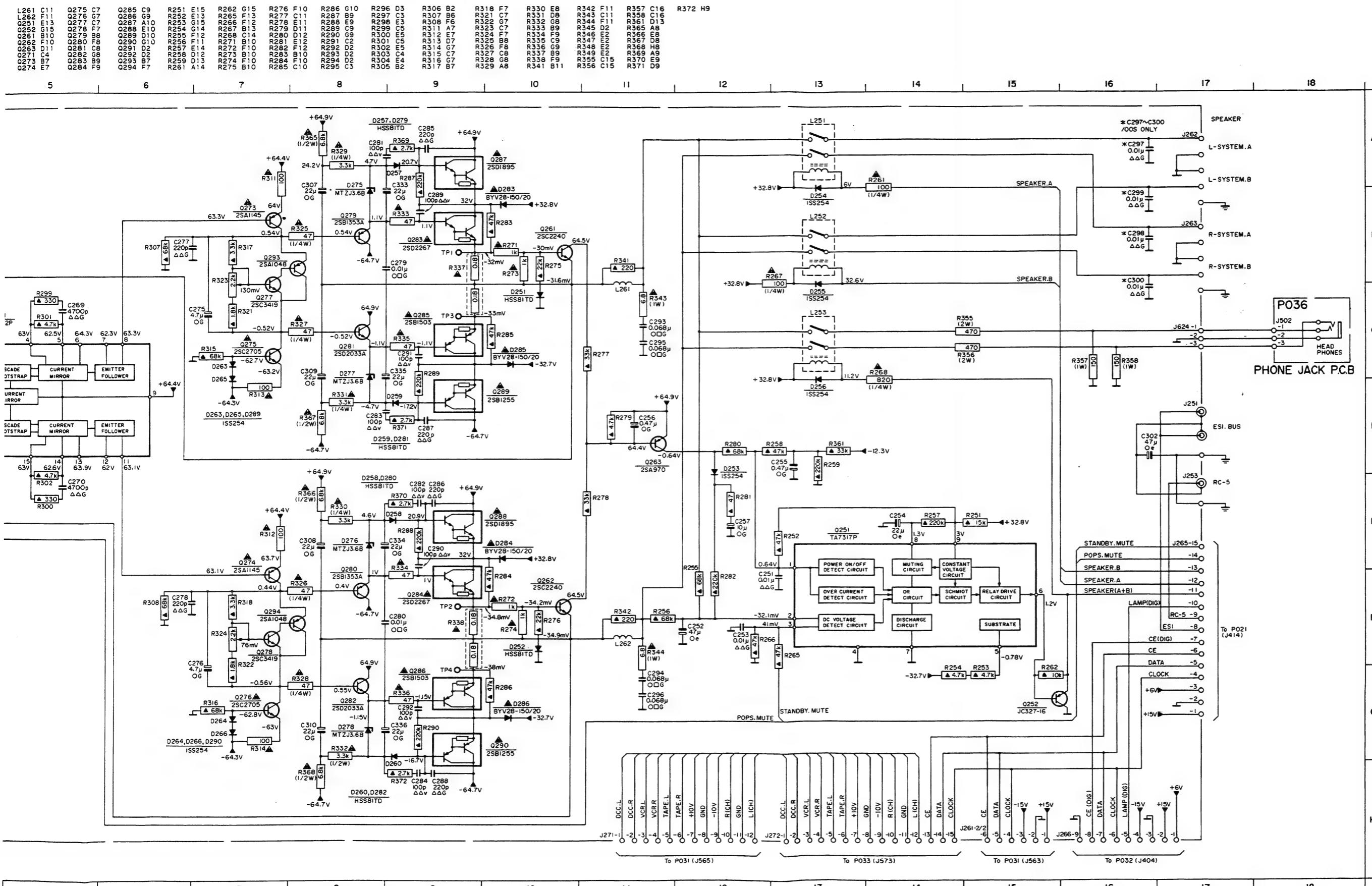
R	R262	R266	R265	R251~R259	R280~R282	R342	R360	R368	R312	R268	R314	R352	R355~R357	R358	R267	R363	R362	R327	R361	R					
	R345	R366	R346	R299	R354	R326	R274	R272	R276	R353	R344	R277~R279	R332	R316	R318	R311	R313	R317	R315 R261						
	R291~R298	R330	R370	R300~R306	R347~R349	R228	R334	R284	R338	R336	R286	R290	R372	R308	R322	R324	R328	R321 R323	R351 R307 R289	R371 R335	R285 R333 R337 R283 R287	R329 R369	R343		
C	C263	C261	C265	C267	C273	C269	C254	C253	C251	C257	C252	C256	C302	C300	C298	C299	C321	C312	C297	C					
	C296	C292	C266	C301	C274	C268	C259	C260	C306	C305			C323~C327	C277	C315	C317	C309	C283	C279 C318 C316	C255 C307	C322 C314	C313 C311			
	C308	C282	C286	C334	C270	C280	C290	C296	C294	C292	C310	C336	C288	C284	C278	C276	C304	C275 C303	C287	C335	C291	C289	C285 C333 C281	C295 C293	C319
D	D262	D261		D288	D253	D287		D274	D270		D266	D256		D255		D273	D271	D301~D308	D254	D291	D292		D		
	D276	D284	D272	D268	D252		D278		D286		D264		D263	D265	D285	D277	D269	D267	D275	D251	D283				
Q	Q291	Q292	Q271	Q252	Q288	Q280	Q251	Q284	Q261	Q263	Q282	Q286	Q262	Q290	Q301~Q303	Q294	Q273~Q278	Q293	Q289	Q285	Q281	Q283	Q279	Q287	Q
F - L											L262		L253				L252		F295	L251	L261	F294		F - L	

SOLDER SIDE VIEW



C251	F12	C264	D3	C276	G7	C286	E9	C296	C11	C310	G8	D256	D13	D276	E8	L261	C11	Q275	C7	Q285	C9	R251	E15	R262	G15	R276	F10	R286	G10	R296	D3	R306	B2	R318	F7	R330	E8	R342	F11	R357	C16	R372	H9		
C252	F12	C265	C3	C277	B6	C287	D9	C297	A16	C333	A16	D257	A9	D277	G1	L262	F11	Q276	C7	Q286	G9	R252	E15	R263	F13	R277	C11	R287	B9	R297	C3	R307	B6	R321	C7	R331	C11	R343	C11	R358	C16	R361	D13		
C253	F12	C266	D3	C278	F6	C288	H9	C298	B16	C334	C9	D258	G9	D278	G9	L263	E13	Q277	C7	Q287	A10	R253	G15	R266	F12	R278	E11	R288	E9	R298	E3	R308	F6	R322	G7	R332	G8	R344	F11	R356	C16	R361	D13		
C254	E4	C267	C3	C279	B9	C289	B9	C299	C16	C335	B16	D260	H9	D280	H9	L264	F10	Q278	F7	Q288	E10	R254	G14	R267	B13	R279	D11	R289	C9	R299	E5	R311	A7	R323	C7	R333	B9	R345	D2	R365	A8	R366	E8	R372	H9
C255	E4	C268	C3	C270	G9	C280	G9	C300	C16	C336	G9	D260	H9	D284	E10	L265	B10	Q279	B8	Q289	D10	R255	F12	R268	C14	R280	D12	R290	G9	R300	E5	R312	E7	R324	F7	R334	B9	R346	E20	R366	E8	R372	H9		
C256	E4	C269	C3	C271	G9	C281	A8	C291	C9	C301	E9	D251	C10	D263	C7	D285	C10	L266	F10	Q280	F8	Q290	G10	R256	F11	R271	B10	R281	E12	R291	C2	R301	E5	R313	D7	R325	B8	R335	C9	R346	E20	R366	E8	R372	H9
C257	E12	C270	E5	C282	E9	C292	G9	C302	D16	D252	F10	D264	G7	D286	G10	L267	D11	Q281	C8	Q291	D2	R257	E14	R272	F10	R282	F12	R292	D2	R302	D5	R314	G7	R326	B8	R336	C9	R346	E20	R366	E8	R372	H9		
C261	C3	C273	C4	C283	D8	C293	C11	C307	A8	D253	B13	D265	D7	L255	A13	Q271	C4	Q282	G8	Q292	D2	R258	D12	R273	B12	R283	B10	R293	D2	R303	C4	R315	C7	R327	B8	R337	G9	R349	E20	R369	A9	R370	C16	R372	H9
C262	D3	C274	E4	C284	H9	C294	G11	C308	E8	D254	B13	D266	G7	L256	B13	Q273	B7	Q283	B9	Q293	B7	R259	D13	R274	F10	R284	F10	R294	D2	R304	N4	R317	G7	R329	G8	R338	R9	R349	E20	R369	A9	R370	C16	R372	H9
C263	C3	C275	C7	C285	A9	C295	C11	C309	C8	D255	C13	D275	A8	L257	C13	Q274	E7	Q284	F9	Q294	F7	R261	A14	R275	B10	R285	C10	R295	C3	R305	D4	R317	B7	R329	A8	R341	B11	R356	C15	R371	D9				

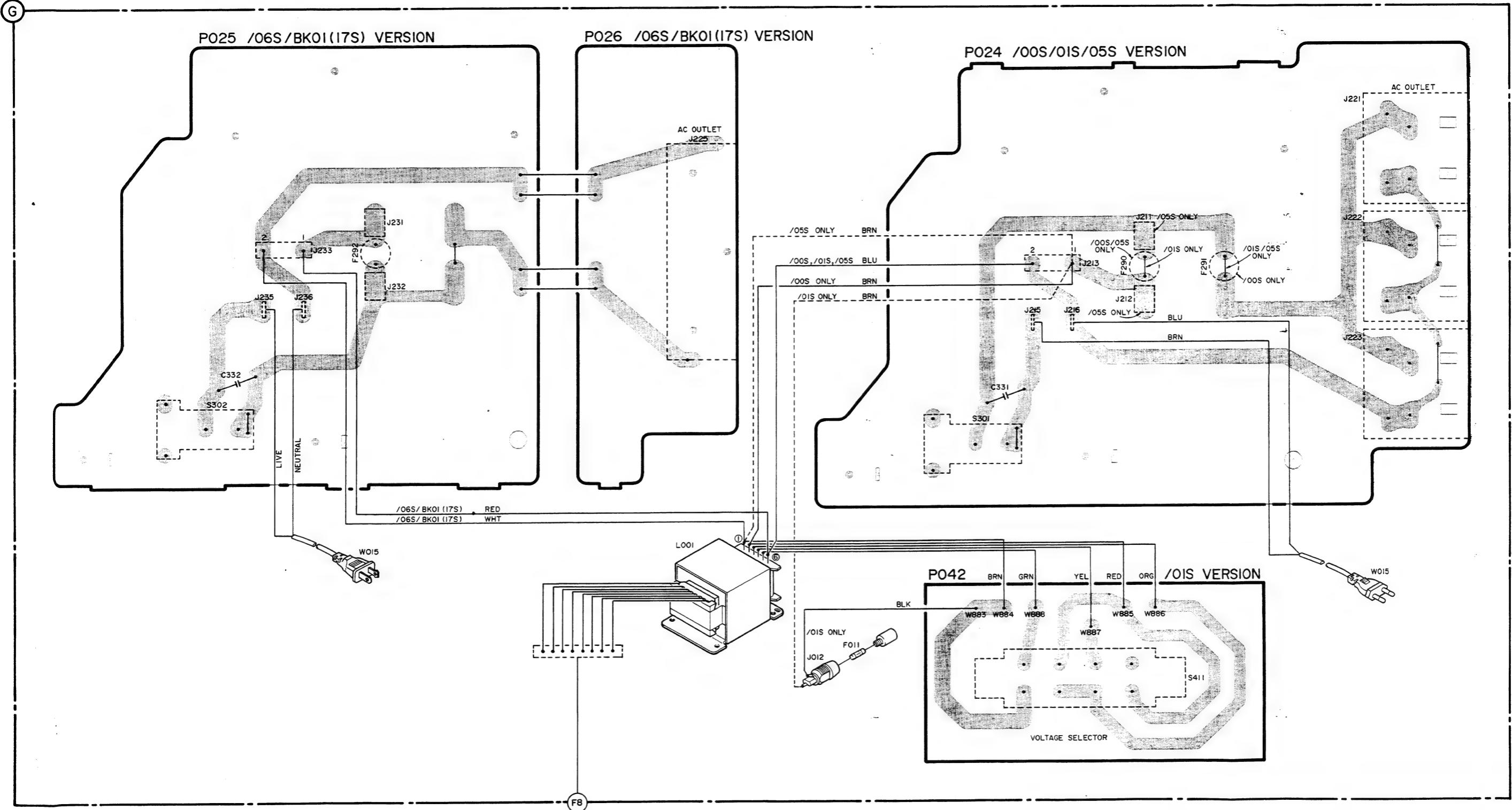




C	C332	C	R352	R355
F-L-S	S302	F292	R311	R313

C	C331	C	R352	R355
F-L-S	S301	F290	R320	R321 R323

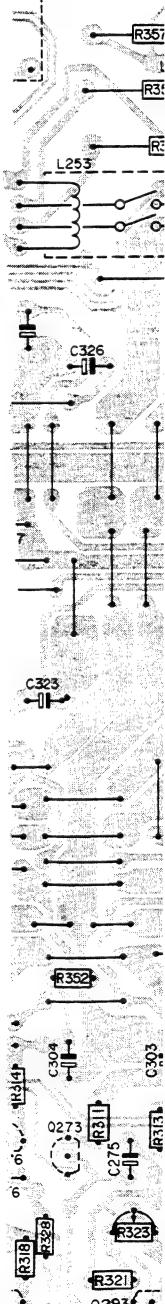
SOLDER SIDE VIEW

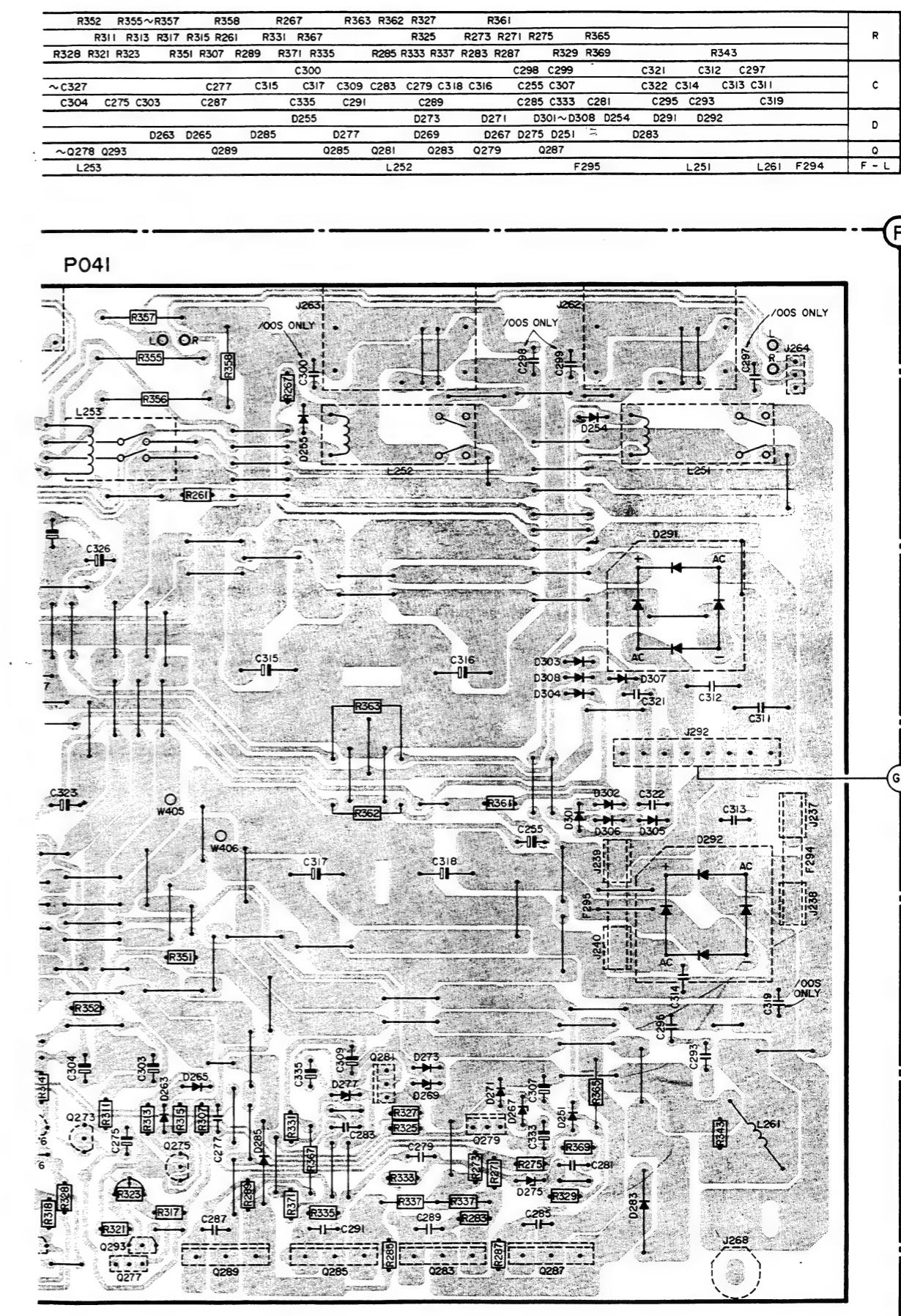
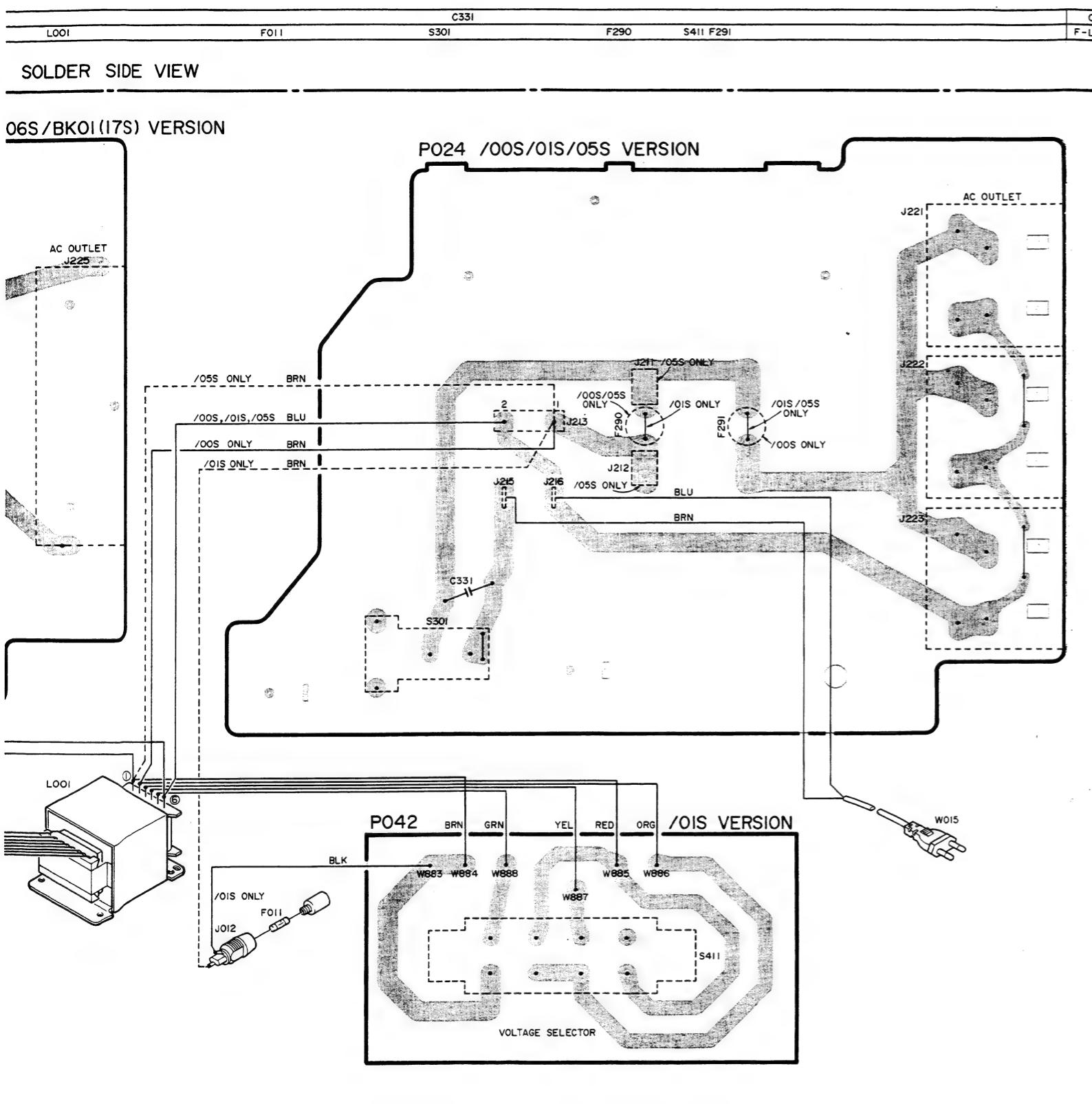


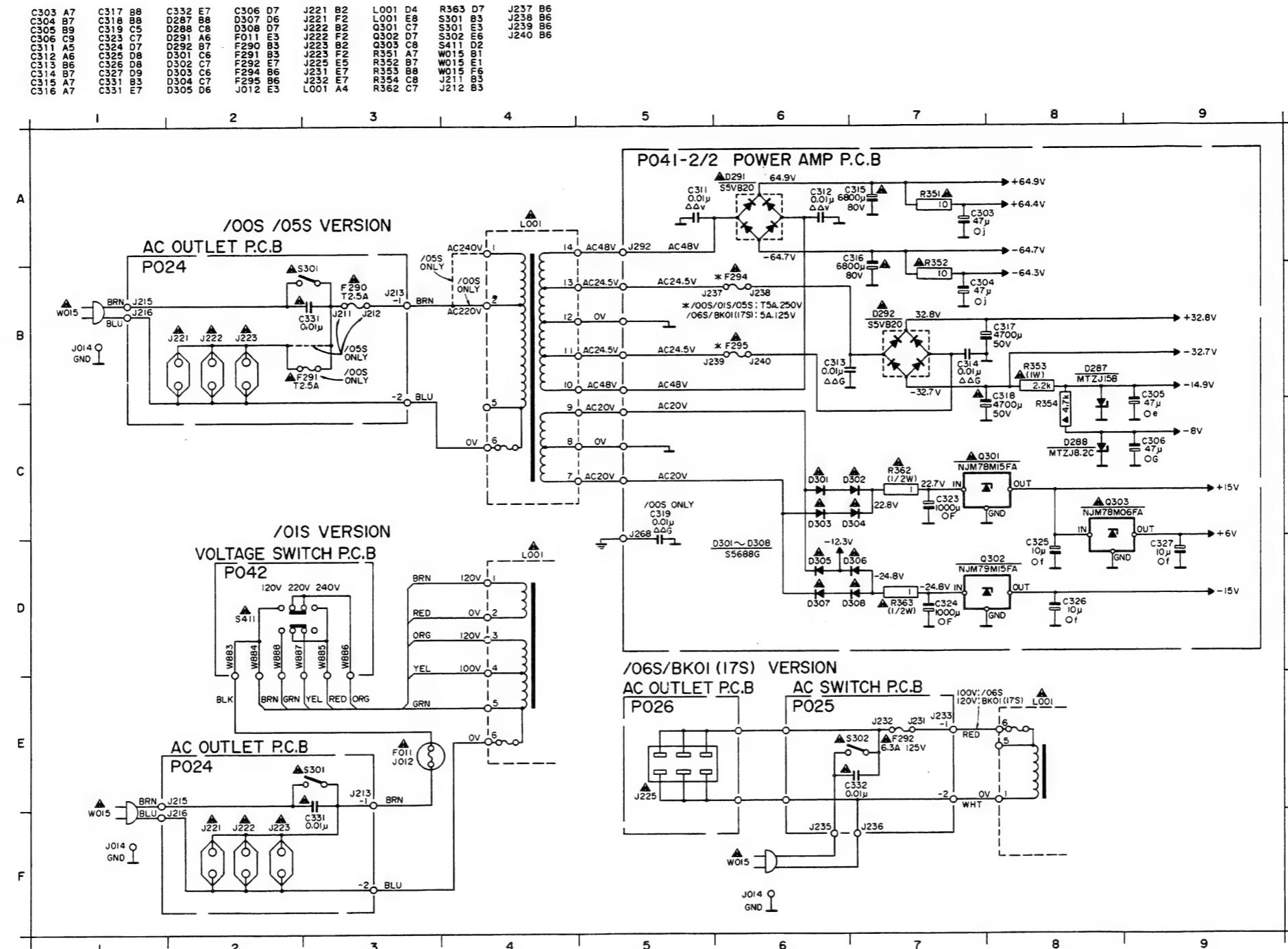
R352 R355
R311 R313
R320 R321 R323

~C327
C304 C275 C30
~0278 0293
L253

P041

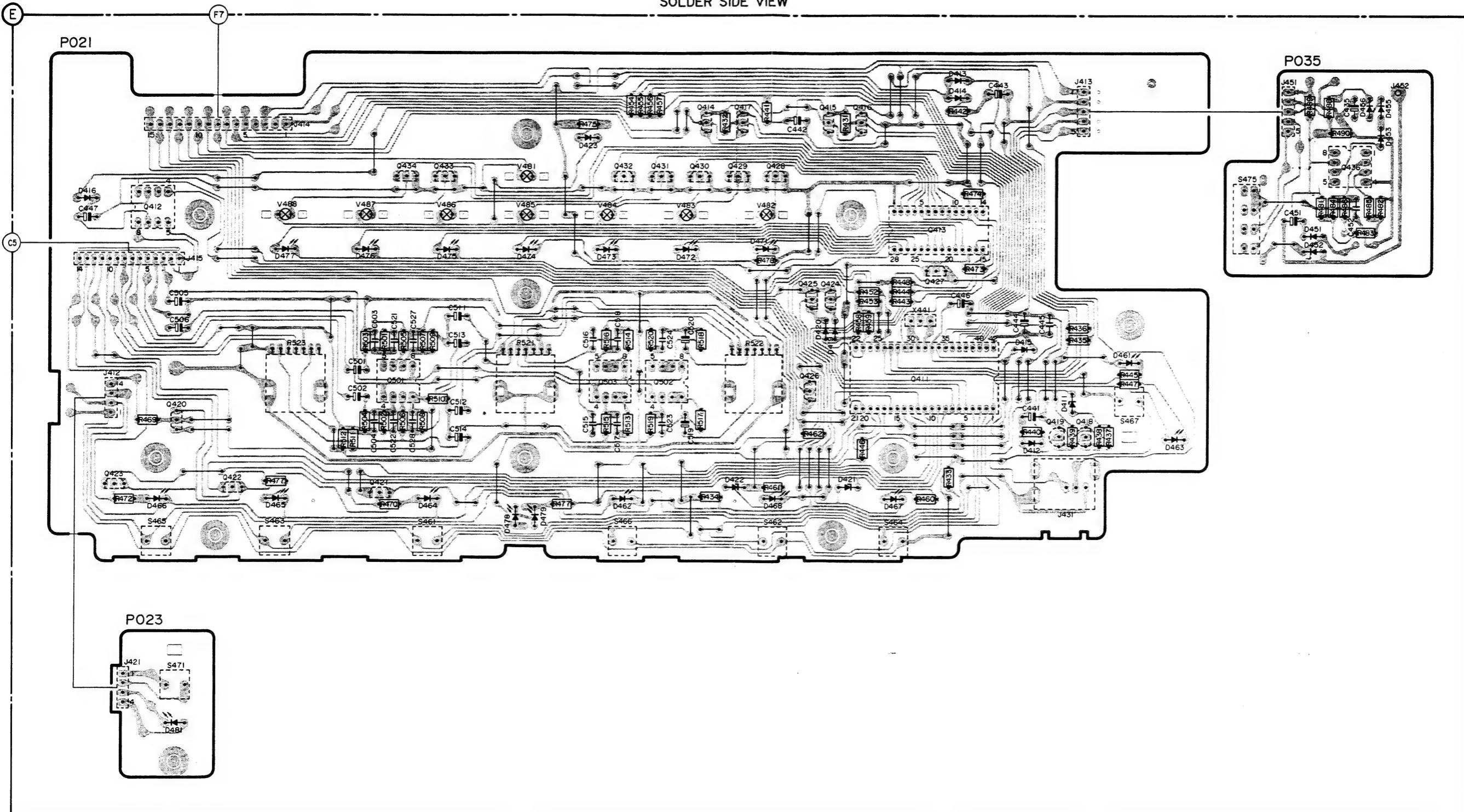


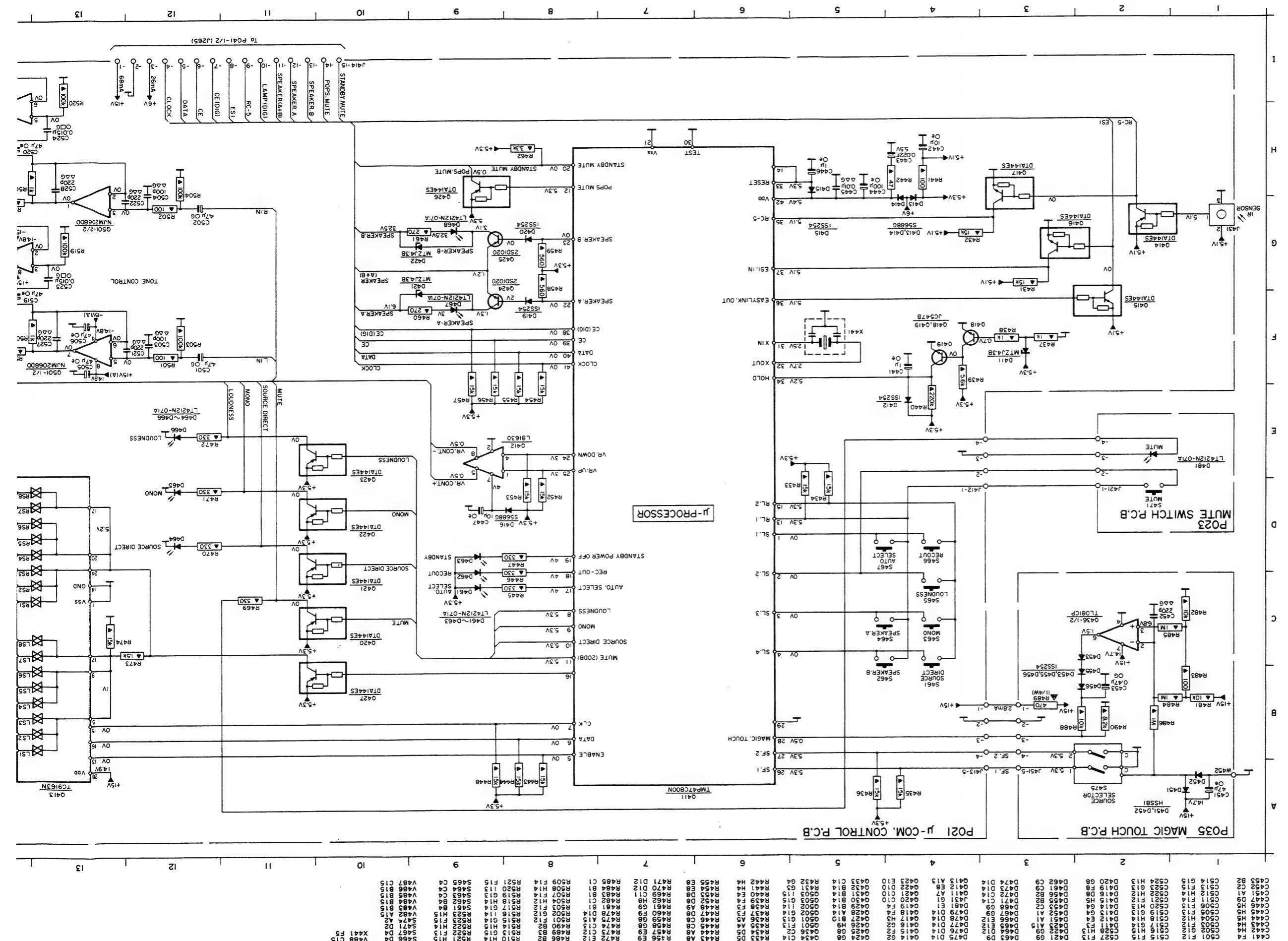


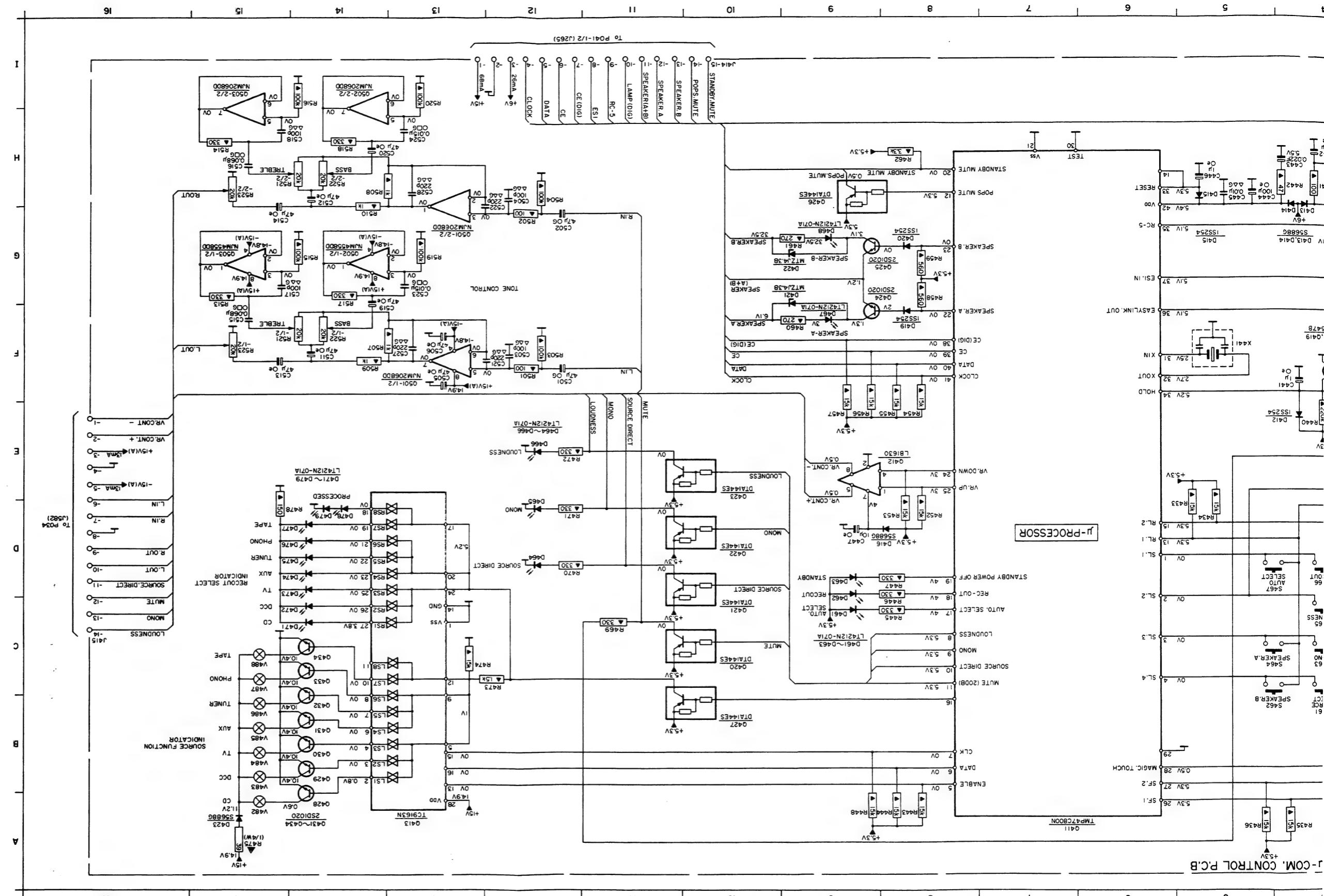


R	R469	R523	R503 R501 R505~R510	R521	R475 R516 R514 R454~R457 R520 R518 R432 R441 R478	R431 R452 R453 R448 R444 R443 R442 R474	R436 R435	R445 R447	R489 R488 R490	R
	R472	R477	R512 R511 R504 R502 R470	R477	R515 R513 R519 R517 R434 R522 R461	R462 R458 R446 R459 R460 R433	R440	R439 R438 R437	- R481~R486	
C	C447	C505	C501~C504 C521 C527 C511~C514	C515~C518	C524 C520	C442	C443	C444 C441 C445	C451 C452	C
			C522 C528	C523 C519			C446		C453	
D	D416	D477	D476 D475	D474	D423 D473 D472 D471	D420 D419	D413 D414	D415 D461	D456 D455	D
	D466 D481	D465	D464	D478 D479	D462 D422 D468 D421	D467	D412 D411	D463	D451 D452 D453	
Q	Q412 Q420	Q422	Q421 Q501 Q434 Q433	Q503 Q432	Q431 Q502 Q430 Q414 Q429 Q417 Q428 Q424~Q426 Q415 Q416	Q411 Q427 Q413	Q419 Q418	Q436	Q436	Q
	S - V - X	S465 S471	S463 V488 V487	S461 V486 V481 V485	V484 S466 V483	V482 S462 S464 X441	S467	S475	S - V - X	

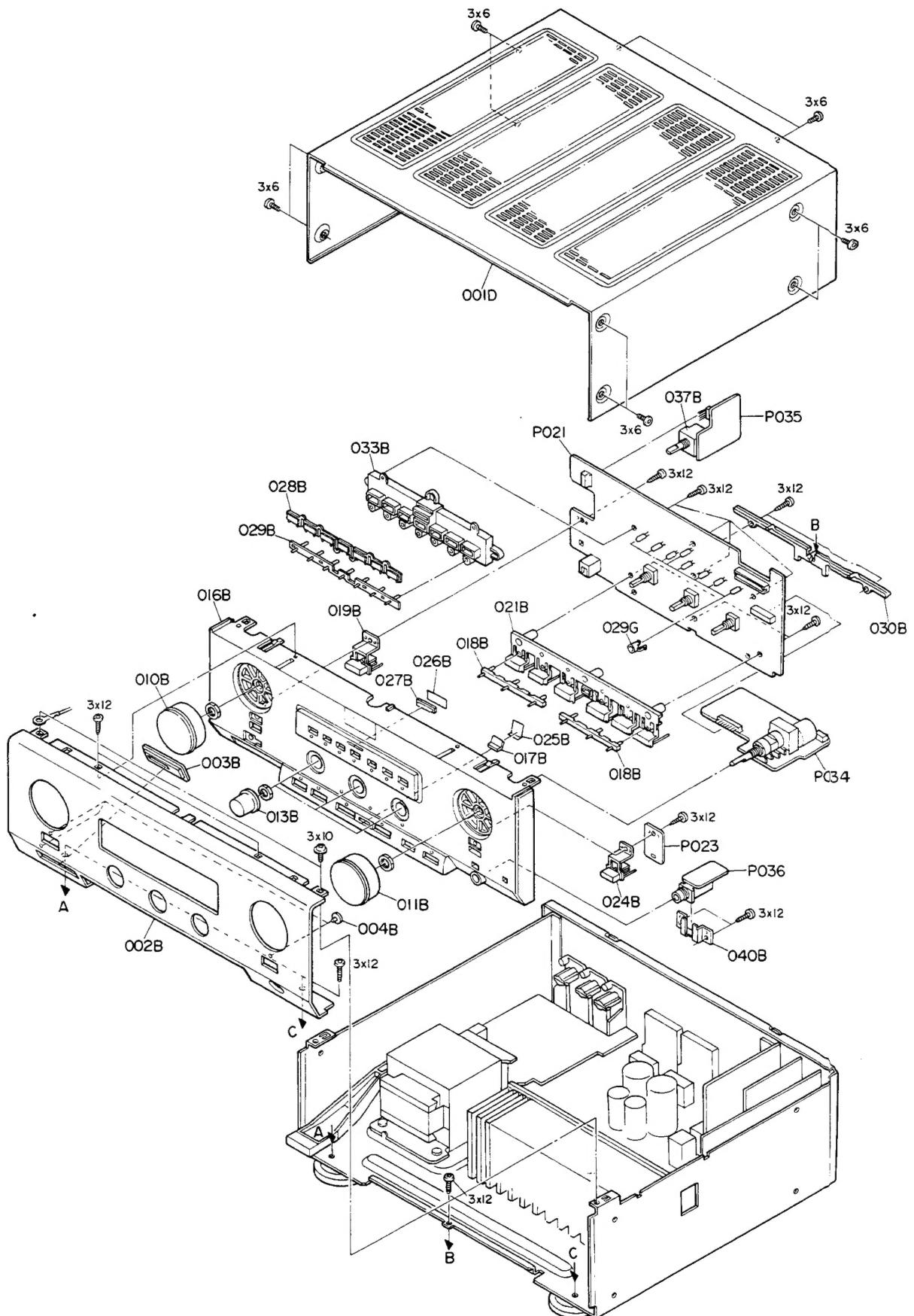
SOLDER SIDE VIEW

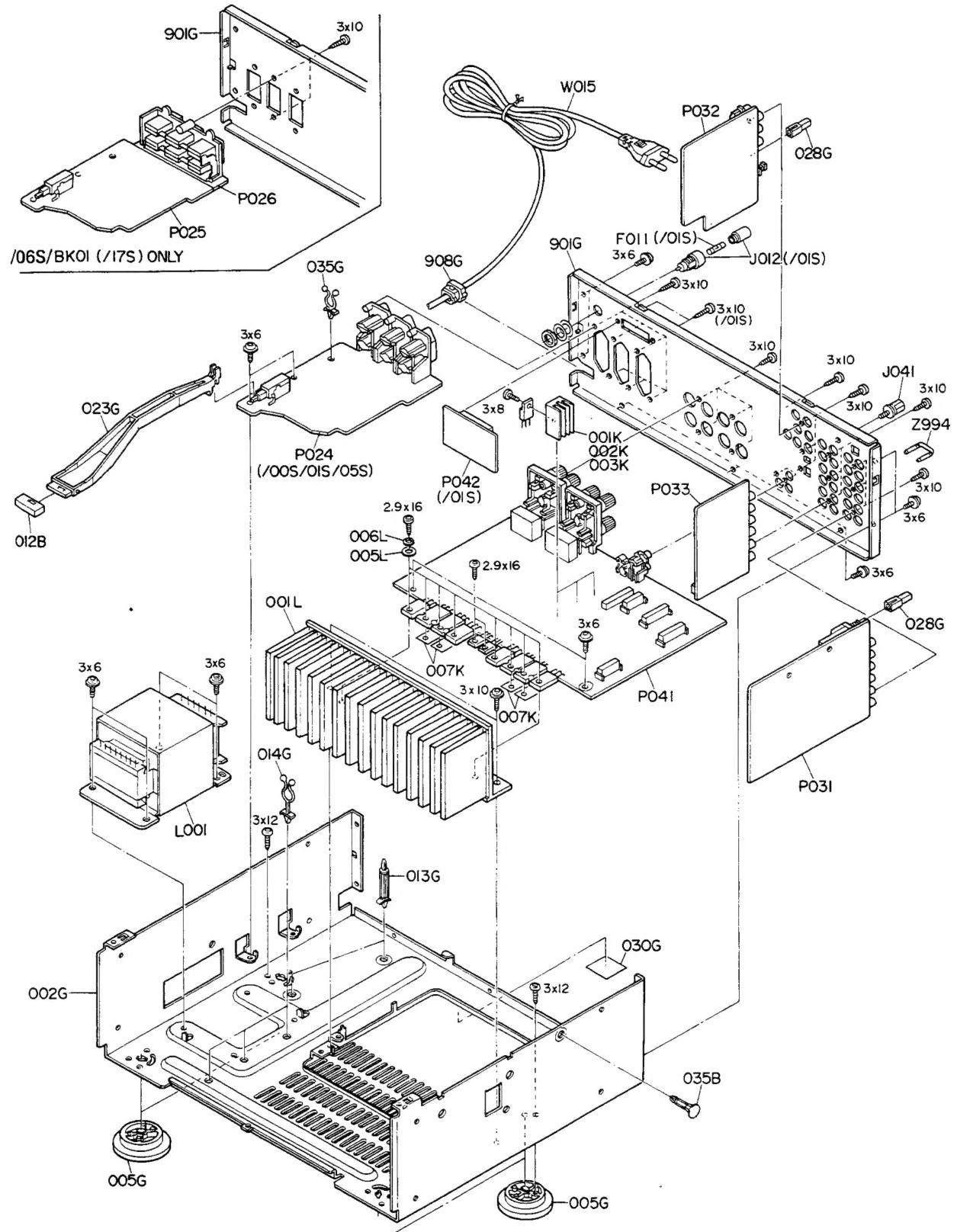






EXPLODED VIEW AND PARTS LIST





Q251	4822 209 83312	TA7317P	C315, C316	4822 124 80234	Cap. elect 6800 μ F 80V
Q271	4822 209 83732	AN7062P	C317, C318	4822 124 41603	Cap. elect 4700 μ F 50V
Q301	4822 209 82829	NJM78M15FA	C443	4822 124 23295	Cap. big elect 0.022 μ F 5.5V
Q302	4822 209 61526	NJM79M15FA	C557, C558	4822 124 22279	Cap. big elect. 510 μ F 10V
Q303	4822 209 62423	NJM78M06FA	C569, C570	4822 124 22278	Cap. big elect. 51 μ F 10V
Q401	4822 209 83784	IC9163N			
Q402, Q403	4822 209 31539	PC74HCU04	S292	4822 276 20519	OPT/COAX
Q411	4822 209 31541	TMP47C800N	S301	4822 276 13285	Power /00S/01S/05S
Q412	4822 209 73287	LB1630	S302	4822 276 13285	Power BK01
Q413	4822 209 83784	TC9163N	S461÷S467	4822 276 13213	Functions
Q436	5322 130 42216	TL081CP	S471	4822 276 13213	Mute
Q501	4822 209 73064	NJM2068DD	S475	4822 273 20368	Source Select
Q502, Q503	4822 209 83631	NJM4558DD	S551	4822 276 20468	MM/MC
Q511	4822 209 73064	NJM2068DD	MISCELLANEOUS		
Q512, Q513	4822 209 62784	TC9215P	F290	4822 253 30396	Fuse 2.5A 250V /00S
Q555	4822 209 73064	NJM2068DD	F290	4822 253 30398	Fuse 2.5A 250V /05S
Q561, Q562	4822 209 72748	LC7821	F291	4822 253 30396	Fuse 2.5A 250V /00S
Q563	4822 209 31538	LC7824	F292	4822 253 30399	Fuse 6.3A 125V BK01
			F294	4822 253 30397	Fuse 5A 250V /00S/01S/05S
L251, L252	4822 280 70354	Relay speaker	F294	4822 253 30335	Fuse 5A 125V BK01
L253	4822 280 20196	Relay phone	F295	4822 253 30397	Fuse 5A 250V /00S/01S/05S
L261, L262	4822 157 63085	Air coil SPK	F295	4822 253 30335	Fuse 5A 125V BK01
L401, L402	4822 148 81268	Pulse transformer 100 μ H	J211	4822 256 30329	Jack fuse clip /05S
L551, L552	4822 156 11019	Choke coil 320 μ H /00S	J212	4822 267 30978	Jack fuse clip /05S
			J221÷J223	4822 267 31194	Jack AC Outlet /00S/01S
R261, R267	4822 115 90167	Res. fuse 100E 1/4W	J221÷J223	4822 265 20588	Jack AC Outlet /05S
R268.	4822 116 83919	Res. fuse 820E 1/4W	J225	4822 265 20589	Jack AC Outlet BK01
R271÷R274	4822 052 10102	Res. 1K 1/6W	J231	4822 256 30329	Jack fuse clip BK01
R311÷R314	4822 052 10102	Res. 1K 1/6W	J232	4822 267 30978	Jack fuse clip BK01
R323, R324	4822 100 20681	Res. trimmer 2.2k (B)	J237	4822 256 30329	Jack fuse clip
R325÷R328	4822 115 90167	Res. fuse 100E 1/4W	J238	4822 267 30978	Jack fuse clip
R329÷R332	4822 050 23322	Res. 3.3k 1/4W	J239	4822 256 30329	Jack fuse clip
R333÷R336	4822 052 10479	Res. 47E 1/6W	J240	4822 267 30978	Jack fuse clip
R337, R338	4822 116 82049	Res. 0.18E 3W	J262, J263	4822 290 81517	Terminal SPK /00S/01S/05S
R343, R344	4822 053 10688	Res. 6.8E 1W	J262, J263	4822 290 81518	Terminal SPK BK01
R351, R352	4822 052 10109	Res. 10E 1/6W	J431	4822 130 81254	Photo unit CP1U520X
R353	4822 053 10222	Res. 2.2k 1W	J501	4822 265 20555	Jack headphone
R355, R356	4822 053 11471	Res. 470E 2W	J571	4822 265 20558	Terminal RCA pin 4P
R357, R358	4822 053 10151	Res. 150E 1W	V481÷488	4822 134 41116	Lamp 75 mA 12V
R362, R363	4822 050 21108	Res. 1E 1/2W	X441	4822 242 73696	Seramic resonator, 8.00 MHz
R365÷R368	4822 116 83918	Res. 6.8k 1/2W			
R425, R475	4822 116 90241	Res. fusible 390E 1/4W			
R489	4822 050 24701	Res. 4700E 1/4W			
R521	4822 101 30794	Potm. treble 20k			
R522	4822 101 30794	Potm. bass 20k			
R523	4822 101 30795	Potm. bal. 20k			
R546	4822 101 30796	Potm. volume 50k/5k			
R577÷R580	4822 050 22212	Res. 2.21k 1/6W			
R603, R604	4822 113 90141	Res. fuse 220E 1/4W			

ELECTRICAL PARTS LIST

002B	4822 218 10468	Front panel
003B	4822 381 11347	Lens, sensor
004B	4822 381 11346	Lens, ESI/PWR/MUT
010B	4822 413 41727	Knob, source select
011B	4822 413 41728	Knob, volume
012B	4822 462 71808	Cap, power button
013B	4822 413 41729	Knob, B/T/BAL
016B	4822 464 90746	Chassis, front
017B	4822 381 11348	Lens, process
018B	4822 381 11344	Lens, function
019B	4822 410 62051	Button, auto select
021B	4822 410 62049	Button, function
024B	4822 410 62051	Button, muting
027B	4822 381 11342	Lens, digital
028B	4822 381 11343	Lens, function lamp
029B	4822 381 11345	Lens, function LED
005G	4822 462 41888	Leg
013G	4822 466 93075	Support
023G	4822 404 60747	Link, power
028G	4822 412 20506	Knob, phono
908G	4822 532 60948	Bushing, AC cord
F011	4822 253 30398	Fuse, T2.5A 250V /01S
J012	4822 256 30233	Jack, fuse holder /01S
L001	4822 146 21678	Power transformer /00S/05S
	4822 146 21679	Power transformer /01S
	4822 146 21681	Power transformer BK01
001T	4822 736 21465	User manual /00S/01S/05S
	4822 736 21466	User manual BK01

 		
Q261, Q262	4822 130 43233	2SC2240
Q263	4822 130 42951	2SA970
Q273, Q274	4822 130 42999	2SA1145
Q275, Q276	4822 130 43283	2SC2705
Q277, Q278	4822 130 60117	2SC3419(Y)
Q279, Q280	4822 130 62334	2SB1353A(E)
Q281, Q282	4822 130 62335	2SD2033A(E)
Q283, Q284	4822 130 62738	2SD2276
Q285, Q286	4822 130 62737	2SB1503
Q287, Q288	4822 130 62954	2SD1895
Q289, Q290	4822 130 63089	2SB1255
Q291, Q292	4822 130 43819	2SC2878(B)
Q293, Q294	4822 130 60107	2SA1048(Y)
Q404	4822 130 62386	JC557B
Q405	4822 130 63091	2SD1020(F)
Q414, Q415	4822 130 42682	DTA144ES
Q416, Q417	4822 130 62797	DTC144WS
Q418, Q419	4822 130 62295	JC547B
Q420÷Q423	4822 130 42682	DTA144ES
Q424÷Q425	4822 130 63091	2SD1020(F)
Q426, Q427	4822 130 42682	DTA144ES
Q428÷Q434	4822 130 63091	2SD1020(F)
Q551÷Q554	4822 130 42839	2SK369BL
  		
D251, D252	4822 130 80837	HSS81
D253÷D256	4822 130 33305	1SS176 (MA165, 1SS254)
D263÷D266	4822 130 33305	1SS176 (MA165, 1SS254)
D267÷D270	4822 130 80317	MTZJ5.1B
D271÷D274	4822 130 33305	1SS176 (MA165, 1SS254)
D275÷D278	4822 130 80316	MTZJ3.6A
D279÷D282	4822 130 80837	HSS81
D283÷D286	4822 130 83095	BYV28
D287	4822 130 80322	MTZJ15B
D288	4822 130 80273	MTZJ8.2C
D291, D292	4822 130 30984	S5VB20
D301÷D308	4822 130 80839	S5688G
D401, D402	4822 130 33305	1SS176(MA165, 1SS254)
D403, D404	4822 130 80839	S5688G
D411	4822 130 31554	MTZJ4.3B
D412	4822 130 33305	1SS176 (MA165, 1SS254)
D413, D414	4822 130 80839	S5688G
D415	4822 130 33305	1SS176 (MA165, 1SS254)
D416	4822 130 80839	S5688G
D419, D420	4822 130 33305	1SS176 (MA165, 1SS254)
D421, D422	4822 130 31554	MTZJ4.3B
D423	4822 130 80839	S5688G
D451, D452	4822 130 80837	HSS81
D453, D455	4822 130 33305	1SS176 (MA165, 1SS254)
D456	4822 130 33305	1SS176 (MA165, 1SS254)
D461÷D468	4822 130 82978	L.E.D. LTL-4212N-071A
D471÷D479	4822 130 82978	L.E.D. LTL-4212N-071A
D481	4822 130 82978	L.E.D. LTL-4212N-071A
D561÷D564	4822 130 80319	MTZJ9.1C